ARIZONA-AMERICAN WATER COMPANY, INC.

DOCKET NO. WS-01303A-06-0403

SURREBUTTAL TESTIMONY

OF

WILLIAM A. RIGSBY, CRRA

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

MAY 17, 2007

INTRODUCTION 1

SUMMARY OF ARIZONA-AMERICAN'S REBUTTAL TESTIMONY 2

CAPITAL STRUCTURE 5

COST OF DEBT 7

COST OF EQUITY CAPITAL 9

ATTACHMENT A

ATTACHMENT B

ATTACHMENT C

ATTACHMENT D

SURREBUTTAL SCHEDULES WAR-1 THROUGH WAR-9

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is William A. Rigsby. I am a Public Utilities Analyst V employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please state the purpose of your surrebuttal testimony.

A. The purpose of my testimony is to respond to Arizona-American Water Company Inc.'s ("Arizona-American" or "Company") rebuttal testimony on RUCO's recommended rate of return on invested capital (which includes RUCO's recommended capital structure, cost of debt and cost of common equity) for the Company's Anthem/Agua Fria Water and Wastewater Districts ("Anthem/Agua Fria Districts").

Q. Have you filed any prior testimony in this case on behalf of RUCO?

A. Yes, on March 27, 2007, I filed direct testimony with the Arizona Corporation Commission ("ACC" or "Commission"). My direct testimony addressed the cost of capital issues that were raised in Arizona-American's application requesting a permanent rate increase ("Application") based on a test year ended December 31, 2005.

...

Q. How is your surrebuttal testimony organized?

A. My surrebuttal testimony contains five parts: the introduction that I have just presented; a summary of Arizona-American's rebuttal testimony; a section on capital structure; a section on the cost of debt; and, a section on the cost of equity capital.

SUMMARY OF ARIZONA-AMERICAN'S REBUTTAL TESTIMONY

Q. Have you reviewed Arizona-American's rebuttal testimony?

A. Yes. I have reviewed the rebuttal testimony, filed on April 26, 2007, of Company witnesses Thomas M. Broderick and Bente Villadsen, Ph.D. Both Mr. Broderick and Dr. Villadsen address the cost of capital issues in this case.

Q. Please summarize Mr. Broderick's rebuttal testimony.

A. Mr. Broderick's rebuttal testimony presents a revised capital structure and a revised cost of debt. Mr. Broderick also takes issue with the capital structure and cost of debt recommendations of ACC Staff witness Pedro M. Chavez.

Q. Please summarize Dr. Villadsen's rebuttal testimony.

A. Dr. Villadsen's rebuttal testimony compares and contrasts the differences between our respective analyses, which used both the discounted cash flow ("DCF") method and the CAPM or, as Dr. Villadsen refers to it, the

"risk positioning method," for estimating the cost of common equity in this case. Dr. Villadsen takes issue with certain assumptions that I have incorporated into my DCF model, the choice of companies that I use in my water company sample, the manner in which I have taken analyst's optimism bias into account, my reliance on a geometric mean, and the various inputs used in my CAPM model.

Q. Briefly summarize the positions of the parties to the case regarding capital structure, cost of debt, cost of equity and weighted cost of capital.

A. As stated in Mr. Broderick's rebuttal testimony, Arizona-American has revised the original Company-proposed capital structure, which was comprised of 60.0 percent debt and 40.0 percent equity, and is now proposing a capital structure of 58.4 percent debt and 41.6 percent equity. ACC Staff is recommending a capital structure comprised of 64.2 percent debt and 35.8 percent equity. RUCO has not made any changes to its recommended capital structure comprised of 60 percent debt and 40 percent equity. With regard to the cost of debt, the parties to the case are presently recommending the following:

Arizona-American	5.45%
ACC Staff	5.30%
RUCO	5.37%

The costs of common equity presently being recommended by the parties to the case are as follows:

Arizona-American	11.75%
ACC Staff	10.40%
RUCO	10.01%

The weighted costs of capital presently recommended by the parties to the case are as follows:

Arizona-American	8.07%
ACC Staff	7.10%
RUCO	7.22%

As can be seen above, there is presently an 85 basis point difference between the Company-proposed 8.07 percent weighted cost of capital and RUCO's revised recommended weighted cost of capital of 7.22 percent (Page 1 of Surrebuttal Schedule Page WAR-1). RUCO and ACC Staff's recommended weighted costs of capital fall within 12 basis points of each other.

CAPITAL STRUCTURE

Q. Has RUCO revised its recommended capital structure consisting of 60.0 percent debt and 40.0 percent equity?

A. No. RUCO is continuing to recommend the same hypothetical capital structure that the Company originally proposed in this proceeding.

Q. Has Arizona-American revised the original Company-proposed capital structure?

A. Yes. As I stated above, Arizona-American has revised the original Company-proposed capital structure, which was comprised of 60.0 percent debt and 40.0 percent equity, and is now proposing a capital structure of 58.4 percent debt and 41.6 percent equity.

Q. Why has Arizona-American revised the original Company-proposed capital structure?

A. Mr. Broderick stated in his rebuttal testimony that the revised capital structure, consisting of 58.4 percent debt and 41.6 percent equity, will be the Company's actual capital structure after a future restructuring of debt and an expected infusion of equity capital occurs later this year. The Company presently has a financing application[1] before the Commission seeking approval of the aforementioned refinancing, however the

[1] Docket No. WS-01303A-07-0145, Financing Application filed on March 8, 2007.

Commission has not made any final decision on the Company's financing application to date.

Q. Why does RUCO continue to recommend the same hypothetical capital structure that the Company originally proposed in this proceeding in light of Mr. Broderick's rebuttal testimony?

A. RUCO continues to recommend the same hypothetical capital structure that the Company originally proposed in this proceeding for two reasons. First the events described in Mr. Broderick's rebuttal testimony are speculative and have no basis in fact at this point in time. Second, the hypothetical capital structure being recommended by RUCO is very close to the revised capital structure that Mr. Broderick proposes in his rebuttal testimony. For these reasons, RUCO sees no need to change its recommended capital structure at this time.

Q. What are the differences between ACC Staff's recommended capital structure and the capital structure recommended by RUCO?

A. Mr. Chavez is recommending an actual capital structure that reflects an ACC Staff adjustment that provides rate base treatment for a $3 million interconnection agreement between Arizona-American and the City of Phoenix. Mr. Chavez is also recommending that the $3 million associated with the interconnection agreement be treated as zero-cost capital in his

recommended capital structure comprised of 64.2 percent debt and 35.8 percent equity.

Q. Why has RUCO decided not to adopt ACC Staff's recommended rate base and capital structure treatment of the interconnection agreement between Arizona-American and the City of Phoenix?

A. As explained further in the testimony of RUCO witness Rodney Moore, RUCO believes that the interconnection agreement between Arizona-American and the City of Phoenix should be treated as a regulatory asset supported by an advance-in-aid-of-construction ("AIAC") from the City as originally proposed by the Company. Under this form of treatment, the Company would not earn a return on the interconnection agreement until it is repaid. This would also be the case under ACC Staff's recommendation, since the $3 million associated with the interconnection agreement is being treated as zero-cost capital in Mr. Chavez's recommended capital structure. RUCO believes that its decision to recommend a hypothetical capital structure is in line with RUCO's decision to treat the interconnection agreement as AIAC.

COST OF DEBT

Q. Have you made any changes to RUCO's recommended 5.37 percent cost of debt?

A. No.

Q. Has Arizona-American revised the Company-proposed cost of debt?

A. Yes. In his rebuttal testimony, Mr. Broderick revises the Company-proposed cost of debt from 6.05 percent to 5.45 percent. Mr. Broderick stated in his rebuttal testimony that the revised 5.45 percent figure represents the estimated cost of an additional debt issuance and a refinancing of existing debt that is expected to occur later in 2007.

Q. Do you accept the Company's 5.45 percent revised cost of debt?

A. No. I believe that the 5.37 percent cost of debt that RUCO is recommending is a better cost of debt figure because it was calculated using the stated interest rates that are documented in copies of actual promissory notes on file with the Commission. Mr. Broderick's 5.45 percent figure is based on estimated costs of debt issuances and expected future events (that are at least eighteen months from the Company's 2005 test year), which may not actually occur. The calculation of the revised 5.45 percent cost of debt also includes an additional issuance of debt that has not been used to finance test year plant.

Q. How did RUCO arrive at the 5.37 percent cost of debt that you recommended in your direct testimony?

A. RUCO's recommended 5.37 percent cost of debt was obtained from information presented in the Company's Application and from a compliance report, containing copies of executed promissory notes, which

the Company filed with the Commission on January 8, 2007 (Page 2 of Surrebuttal Schedule WAR-1). These compliance documents were exhibited in Attachment F of my direct testimony.

COST OF EQUITY CAPITAL

Q. Has there been any recent activity in regard to interest rates?

A. Yes. On May 9, 2006, the Federal Reserve decided not to increase or decrease the federal funds rate for the seventh straight FOMC meeting and left the key rate unchanged at 5.25 percent. According to an article[2] that appeared in the May 9, 2007 online edition of The Wall Street Journal, the Fed's action was based on some recent weakening of the economy. According to the Fed's statement that was released after the decision was made to sit pat on rates, the members of the FOMC believed that moderate economic growth was the likeliest scenario in the coming months. The statement also noted that the members of the FOMC expected "somewhat elevated" core inflation rates, which exclude volatile food and energy prices, to come down. The article also stated that the financial markets still expect a rate cut later this year.

…

[2] Blackstone, Brian and Benton Ives-Halpern, "Fed Leaves Rates Unchanged," The Wall Street Journal, May 9, 2007.

Q. Have you made any changes to the 10.27 percent cost of common equity that you recommended in your direct testimony?

A. Yes. I have revised my original 10.27 percent cost of equity recommendation downward to 10.01 percent (Page 3 of Surrebuttal Schedule WAR-1). My revised cost of common equity figure of 10.01 percent is based on current information that was contained in The Value Line Investment Survey ("Value Line") quarterly update on the Water Utility Industry dated April 27, 2007 (Attachment A). In addition, I have updated the eight-week closing stock price data and earnings estimates provided by Zacks Investment Research that I use in my discounted cash flow ("DCF") model analysis (Surrebuttal Schedules WAR-2 through Surrebuttal Schedule 6). With regard to my capital asset pricing model ("CAPM") analysis, I have updated the U.S. Treasury instrument yields that serve as a proxy for the risk free rate of return (Surrebuttal Schedule WAR-7, Pages 1 and 2). There have been no changes to the geometric and arithmetic means of the returns on the S&P 500 index, between 1926 and 2006, used in my CAPM analysis. This information was obtained from Morningstar's SBBI 2007 Yearbook.[3]

…

[3] Formerly published by Ibbotson Associates.

Q. Has Dr. Villadsen made any changes to her recommended 11.75 percent cost of equity capital based on this new information?

A. No. Dr. Villadsen continues to advocate the same 11.75 percent return on common equity that she derived from market information that was available prior to the time of her original filing in June 2006.

Q. Please address Dr. Villadsen's assertion that you failed to quantify the upward 50 basis point adjustment that you made to your original DCF result of 8.60 percent.

A. I have made no secret of how I arrived at my 50 basis point adjustment. As I stated in my direct testimony, I used a 50 basis point adjustment that was authorized in two prior Arizona-American rate case proceedings. In addition to my 50 basis point upward adjustment to my original cost of equity estimates, I am recommending a capital structure that is heavier in equity than what the Company's actual test year capital structure was, thus providing the Company with a higher weighted cost of capital. It should also be noted that in this case I have averaged the higher results of my CAPM analysis with the results of my DCF analysis, thus producing a higher recommended cost of equity than what I have recommended in the past. Furthermore, my CAPM estimates are generous from the standpoint that I have used the yield on a 91-day T-bill rate, which is currently higher than the yields of other longer-term Treasury instruments (Attachment B) even though an argument could be made that a longer-term Treasury yield

would be more appropriate. Finally, as I will explain later in my testimony, My CAPM analyses may also be producing estimates that are higher than what might be warranted based on recent studies that indicate that the actual equity risk premium (i.e. the difference between the expected total return on an equity index, such as the S&P 500, and the return on a riskless asset, such as the yield on a 91-day T-Bill) used in the CAPM model may be lower than the equity risk premiums published by Morningstar.

Q. So you believe that the factors that you have just described make up for any shortfall that your 50 basis point adjustment doesn't take into account?

A. Yes. I believe that each of the factors noted above have contributed to a higher weighted cost of common equity than what might actually be warranted, which will compensate the Company's investors for any perceived additional financial risk.

Q. What is your response to Dr. Villadsen's assertion that your recommended return on common equity is inadequate because it does not produce expected results that are as high as the ones derived from the ATWACC methodology that she relied on?

A. Dr. Villadsen's ATWACC method for calculating the cost of equity capital has now been rejected twice by the Commission in rate case proceedings

that involved the Company's Paradise Valley and Mohave Districts.[4] To my knowledge only one state out of fifty has accepted the methodology that she has used in this proceeding and it is my understanding that it was only a partial acceptance at that. As for Dr. Villadsen's argument that the Company should not be awarded a rate of return that is below what investors expect, one has to take into consideration that the investment community at large is well aware of the fact that regulated utilities, such as Arizona-American, are indeed different from non-regulated entities in terms of how they recover their costs. This information is taken into account when institutions and individual investors make their decisions on where to place their funds. The best example of this can be seen in an MSN Money/CNBC article[5] authored by Jon D. Markman, a weekly columnist for CNBC (Attachment C). In his article, Mr. Markman pitched his suggestions for investing in what some believe to be a coming global water shortage. In regard to domestic utilities, Markman had this to say:

> "Virtually all of the U.S. water utility stocks are regulated by states and counties, which makes them pretty dull. Governmental entities typically give utilities a monopoly in a geographic region, then set their profit margin a smidge above costs. Just about the only distinguishing factor among them are the growth rates of their regions and their ability to efficiently manage their underground pipe and pumping infrastructure."

[4] Decision No. 68858, Dated July 28, 2006 and Decision No. 69440 Dated May 1, 2007
[5] Markman, Jon D, "Invest in the Coming Global Water Shortage," MSN.com, January 12, 2005, http://moneycentral.msn.com/content/P102152.asp.

Q. Do you believe that Southwest Water Company ("SWWC") should have been excluded from your sample based on its percentage of revenues from water utility services as pointed out by the Company's cost of equity witness?

A. No. That would create a sample that is too small. Furthermore, I disagree with Dr. Villadsen's belief that my estimates are biased downward. While it is true that regulated water utilities make up approximately 38.0 percent of total revenues for SWWC, those same regulated utilities will generate 67.0 percent of SWWC's 2006 earnings according to Value Line's April 28, 2006 water utility industry update. The majority of SWWC's remaining revenues and earnings are derived from activities that are closely related to the provision of regulated water and wastewater services (i.e. equipment maintenance and repair, sewer pipeline cleaning, billing and collection services, and state-certified water and wastewater laboratory analysis on a contract basis) as opposed to highly speculative activities that are totally unrelated to the water and wastewater industry. In fact, SWWC actually operates a large wastewater facility near Birmingham, Alabama. For these reasons I saw no need to exclude SWWC from my sample. In addition, I have also averaged the results of my natural gas company proxy, which are somewhat higher than those for my water company sample to arrive at my final cost of equity recommendation. I have done that in this case even though I believe that Arizona-American, which is engaged in the provision of water and wastewater services, has

more in common with the companies in my water sample than it does in the companies in my natural gas sample. It should also be pointed out that Water utilities are considered to be the last real monopoly in the U.S.

Q. Do you accept the modifications that Dr. Villadsen has made to the DCF results that you presented in your direct testimony?

A. No.

Q. Please respond to Dr. Villadsen's criticism that your DCF estimates of external growth are also biased downward.

A. Dr. Villadsen has taken issue with my calculation of "v" for the external growth rate estimate portion of the DCF's growth component. This calculation takes into consideration the fact that, while in theory a utility's stock price should move toward a market to book ratio of 1.0 if regulators authorize a rate of return that is equal to a utility's cost of capital, in reality a utility will continue to issue shares of stock that are priced above book value.

As I explained on pages 17 through 18 of my direct testimony, this same assumption was incorporated into the DCF analysis performed by Mr. Stephen Hill, ACC Staff's cost of cost of capital witness in the Southwest Gas rate case proceeding. Mr. Hill used the same methods that I have used in arriving at the inputs for his DCF model. His final recommendation for Southwest Gas Corporation, which was adopted by the Commission,

was largely based on the results of his DCF analysis, which incorporated the same valid market-to-book ratio assumption that I have used consistently in cases before the Commission.

Q. Please discuss Dr. Villadsen's criticism of your testimony, which asserts that one of the desired effects of regulation is to achieve a market-to-book ratio of 1.0 on the common stock of an investor-owned utility.

A. My direct testimony sets forth the premise that the market value of a utility's stock will tend to move toward book value, or a market-to-book ratio of 1.0, if regulators allow a rate of return that is equal to the cost of capital of firms with similar risk. This premise is recognized among practitioners who have testified in cost of capital proceedings[6].

Despite Dr. Villadsen's hypothetical example on page 14 of her rebuttal testimony, which assumes an extreme regulatory lag that in my opinion does not exist in Arizona, I believe that a utility's market price should equal its book price over the long run if regulators allow a rate of return that is equal to the utility's cost of capital. That is assuming that the utility's rate of return ("ROR") is comparable to the rates of return of other firms in the same risk class. I believe that a better explanation of this concept is one that I have used in the past and assumes that if a hypothetical utility's book price is $20.00 per share and regulators adopt a rate of return that is equal to the utility's cost of capital of 10.00 percent, the utility will earn

[6] Carleton, Willard T. and Morin, Roger A.

$2.00 per share ("EPS"). With earnings of $2.00 per share, and a market required rate of return on equity of 10.00 percent, for firms in the utility's risk class, the market price of the utility's stock will set at $20.00 per share ($2.00 EPS ÷ 10.00% ROR = $20.00 per share price). If the utility records earnings that are higher than the earnings of other firms with similar risk, the market value of the utility's shares will increase accordingly ($2.50 EPS ÷ 10.00% ROR = $25.00 per share). On the other hand, if the utility posts lower earnings, the stock's market price will fall below book value ($1.50 EPS ÷ 10.00% ROR = $15.00 per share).

Because of economic forces beyond the control of regulators, it is not reasonable to assume that the utility will have earnings that match those of firms of similar risk in every year of operation. In some years, earnings may drop causing the market-to-book ratio to fall below 1.0, while in other years the utility may have earnings that exceed those of other firms in its risk classification. However, over the long run the utility's earnings should average out to the earnings that are expected based on its level of risk. These average earnings over time will result in a market-to-book ratio of 1.0. A 1.0 ratio may never be achieved in practice and many investors may not even care what the market-to-book ratio is as long as they receive their required rate of return.

…

Q. Are there any other reasons why your market-to-book ratio calculation is valid?

A. Yes. SWWC, and for that matter each of the other utilities included in my sample, are engaged in unregulated activities to some degree. Because it is difficult to obtain a sample comprised only of "pure play" utilities, the calculation that I have employed in my DCF model helps to eliminate the impact that those unregulated operating segments would have on the market-to-book ratio of the utilities included in my sample.

Q. How do you respond to Dr. Villadsen's comments on your optimism bias argument?

A. On page 25 of her rebuttal testimony, Dr. Villadsen lists three reasons why my optimism bias argument, which compares the results of Value Line projections versus actual returns, is problematic. First she states that results over a one-year period are more difficult to predict; second, she states that the composition of the water industry may change between the time of the forecast and the time the actual return is realized; and third, the fact that Value Line estimates are made by a single analyst.

Dr. Villadsen's first reason is somewhat puzzling from the standpoint that if an analyst cannot estimate results over a 365-day period, then why would an estimate covering a five-year period be more accurate? This is largely the argument that supports my methodology, which evaluates long-term estimates against an historical five-year benchmark average of actual

returns, as opposed to accepting the long-term estimates at their face value as Dr. Villadsen has. Her second argument is essentially meaningless since any industry's composition could change over *any* given period of time as opposed to being restricted to just a one-year time frame. Her third argument, that Value Line's estimates are made by a single analyst, leads me to wonder why she even relied on Value Line estimates. It also adds further support for my methodology for determining growth estimates that does not accept estimates at face value. Like Dr. Villadsen, who relied on other analyst's estimates, I compared my growth estimates against projections made by Value Line and Zacks Investment Research.

Q. Please respond to Dr. Villadsen's statement, also on page 25 of her rebuttal testimony, that "optimism bias is less of an issue for smaller companies and utilities than for the average industry."

A. One has to wonder what small company Dr. Villadsen is referring to given the fact that Arizona-American is part of American Water, which is one of the largest water providers in the U.S. and will soon be publicly traded like the other utilities that are included in my water company sample.

…

Q. Do you agree with Dr. Villadsen's argument that her multi-stage DCF model adjusts for overly optimistic or pessimistic company-specific forecasts?

A. No. Dr. Villadsen's multi-stage DCF model assumes that after five years every individual water company and LDC included in her proxy samples are going to have growth that mirrors the gross domestic product ("GDP") of the entire U.S. economy into perpetuity. This in itself is a rather broad and unrealistic expectation. As I have explained previously, professional analysts often have enough trouble making accurate projections of the one-year earnings of the companies that they follow. It would be unrealistic to believe that projections that extend into perpetuity would be more accurate than the 5-year projections also used in the multi-stage DCF. Further, Dr. Villadsen's multi-stage model gives equal weight to the 5-year and long-term growth estimates used in her model. The growth estimates used in my DCF model are a balance of known historical 5-year growth figures and projected growth estimates over the next 5-year period (i.e. 2007 through 2012) and takes optimism bias into consideration. I believe that five years is a reasonable horizon for future growth estimates, given the fact that utilities typically apply for rate relief within a 3 to 5-year time frame.

…

Q. Are there any other reasons why you oppose Dr. Villadsen's argument for her multi-stage DCF model's estimate that give equal weight equal weight to the 5-year and long-term growth estimates used in her model?

A. Yes. It is interesting to note that the multi-stage DCF model adopted by the Federal Energy Regulatory Commission ("FERC"), places more emphasis on 5-year (short-term) growth expectations as opposed to estimates of future U.S. GDP growth. This can be seen in the following excerpt from the FERC's Cost-of-Service Rates Manual (Attachment D):

> "**Return on Equity or Cost of Equity:** This is the pipeline's actual profit, or return on its investment. The return on equity is derived from a range of equity returns developed using a Discounted Cash Flow (DCF) analysis of a proxy group of publicly held natural gas companies. The two-stage method projects different rates of growth in projected dividend cash flows for each of the two stages, one stage reflecting short-term growth estimates and the other long-term growth estimates. These estimates are then weighted, two-thirds for the short-term growth projection and one-third on the long-term growth, and utilized in determining a range of reasonable equity returns. Two-thirds is used for the short-term growth rate on the theory that short-term growth rates are more predictable, and thus deserve a higher weighting than long-term growth rate projections. An equity return is then selected within this zone based on an analysis of the company's risk."

As stated in the excerpt above, the FERC multi-stage DCF model weighs short-term estimates, similar to the ones used in my single stage DCF model, by a factor of two-thirds based on the fact that they are more predictable and deserve more weight than long-term estimates such as

the inflation-adjusted estimates of future U.S. GDP growth used in the multi-stage DCF model that Dr. Villadsen has relied on.

Q. Do you accept the modifications that Dr. Villadsen has made to the CAPM results that you presented in your direct testimony?

A. No.

Q. Please explain why Dr. Villadsen's criticism regarding the use of a geometric mean in your CAPM analysis is unfounded.

A. As I stated in my direct testimony there is an on-going debate as to which is the better average to rely on. However, it is important to recognize that the information on both means, published by Morningstar, is widely available to the investment community. For this reason alone I believe that the use of both means in a CAPM analysis is appropriate.

The best argument in favor of the geometric mean is that it provides a truer picture of the effects of compounding on the value of an investment when return variability exists. This is particularly relevant in the case of the return on the stock market, which has had its share of ups and downs over the 1926 to 2004 observation period used in my CAPM analysis.

…

Q. Can you provide an example to illustrate the differences between the two averages?

A. Yes. The following example may help. Suppose you invest $100 and realize a 20.0 percent return over the course of a year. So at the end of year 1, your original $100 investment is now worth $120. Now let's say that over the course of a second year you are not as fortunate and the value of your investment falls by 20.0 percent. As a result of this, the $120 value of your original $100 investment falls to $96. An arithmetic mean of the return on your investment over the two-year period is zero percent calculated as follows:

(year 1 return + year 2 return) ÷ number of periods =

(20.0% + -20.0%) ÷ 2 =

(0.0%) ÷ 2 = 0.0%

The arithmetic mean calculated above would lead you to believe that you didn't gain or lose anything over the two-year investment period and that your original $100 investment is still worth $100. But in reality, your original $100 investment is only worth $96. A geometric mean on the other hand calculates a compound return of negative 2.02 percent as follows:

$$(\text{year 2 value} \div \text{original value})^{1/\text{number of periods}} - 1 =$$

$$(\$96 \div \$100)^{1/2} - 1 =$$

$$(0.96)^{1/2} - 1 =$$

$$(0.9798) - 1 =$$

$$-0.0202 = \underline{-2.02\%}$$

The geometric mean calculation illustrated above provides a truer picture of what happened to your original $100 over the two-year investment period.

As can be seen in the preceding example, in a situation where return variability exists, a geometric mean will always be lower than an arithmetic mean, which probably explains why utility consultants typically put up a strenuous argument against the use of a geometric mean.

Q. Can you cite any other evidence that supports your use of both a geometric and an arithmetic mean?

A. Yes. In the third edition of their book, Valuation: Measuring and Managing the Value of Companies, authors Tom Copeland, Tim Koller and Jack Murrin ("CKM") make the point that, while the arithmetic mean has been regarded as being more forward-looking in determining market risk premiums, a true market risk premium may lie somewhere between the arithmetic and geometric averages published in Ibbotson's SBBI yearbook.

Q. Please explain.

A. In order to believe that the results produced by the arithmetic mean are appropriate, you have to believe that each return possibility included in the calculation is an independent draw. However, research conducted by CKM demonstrates that year-to-year returns are not independent and are actually auto correlated (i.e. a relationship that exists between two or more returns, such that when one return changes, the other, or others, also change), meaning that the arithmetic mean has less credence. CKM also explains two other factors that would make the Ibbotson arithmetic mean too high. The first factor deals with the holding period. The arithmetic mean depends on the length of the holding period and there is no "law" that says that holding periods of one year are the "correct" measure. When longer periods (e.g. 2 years, 3 years etc.) are observed, the arithmetic mean drops about 100 basis points. The second factor deals with a situation known as survivor bias. According to CKM, this is a well-documented problem with the Ibbotson historical return series in that it only measures the returns of successful firms. That is, those firms that are listed on stock exchanges. The Ibbotson historical return series does not measure the failures, of which there are many. Therefore, the return expectations in the future are likely to be lower than the Ibbotson historical averages. After conducting their analysis, CKM conclude that 4.0 percent to 5.5 percent is a reasonable forward-looking market risk premium. Adding the current 5-year Treasury yield (Attachment B) of 4.55 percent to

these two estimates indicate a cost of equity of 8.55 percent to 10.05 percent. Given the fact that utilities generally exhibit less risk than industrials, a return in the low end of this range is reasonable.

Q. Can you name any other sources that support CKM's conclusion that 4.0 percent to 5.5 percent is a reasonable market risk premium on a forward-looking basis?

A. Yes. During the 39th annual Financial Forum of the Society of Utility and Regulatory Financial Analysts, which was held at Georgetown University in Washington D.C. on April 19 and 20, 2007, I had the opportunity to hear the views of Aswarth Damodaran, Ph. D. and Felicia C. Marston, Ph. D., professors of finance from New York University and the University of Virginia respectively, who have conducted empirical research on this subject. Dr. Damodaran and Dr. Marston supported CKM's 4.0 to 5.5 percent estimates during a panel discussion that provided both professors with the opportunity to explain their research on the equity risk premium and to answer questions from other financial analysts in attendance. Each of the panelists[7] stated that they believed that a reasonable market risk premium fell between 4.0 percent and 5.0 percent when asked to provide estimates based on their research.

[7] Other analysts taking part in the panel discussion included Stephen G. Hill, CRRA, Principal, Hill Associates and moderator Farris M. Maddox, Principal Financial Analyst, Virginia State Corporation Commission.

Q. If market risk premiums of 4.0 percent to 5.0 percent were used in your CAPM model what would the results be?

A. Using market risk premiums (r_m - r_f) of 4.0 percent to 5.0 percent in my CAPM model produces the following expected returns (k):

Water Company Sample using 4.0 percent

$$k = r_f + [ß (r_m - r_f)]$$

$$k = 4.98\% + [0.88 (4.0\%)]$$

$$k = 8.50\%$$

Water Company Sample using 5.0 percent

$$k = r_f + [ß (r_m - r_f)]$$

$$k = 4.98\% + [0.88 (5.0\%)]$$

$$k = 9.38\%$$

As can be seen above, my CAPM model, using a water company sample average beta (ß) of 0.88 and a six-week average of the higher 91-day T-bill yield of 4.98 percent for the risk free rate of return (r_f), produces an expected return (k) of 8.50 percent to 9.38 percent. My LDC sample, using an average beta of 0.87, produces similar expected returns of 8.46 percent to 9.33 percent. All of which makes my revised recommended 10.01 percent cost of common equity appear to be generous.

Q. Has any of the rebuttal testimony presented by Mr. Broderick, Dr. Villadsen or any of the other witnesses for Arizona-American convinced you to make adjustments to your recommended cost of common equity?

A. No.

Q. Does your silence on any of the issues or positions addressed in the rebuttal testimony of the Company's witnesses constitute acceptance?

A. No, it does not.

Q. Does this conclude your surrebuttal testimony on Arizona-American?

A. Yes, it does.

ATTACHMENT A

Water utility companies ought to fare much better this year. Although most struggled mightily with adverse weather conditions throughout much of 2006, we look for more normalized weather patterns to paint a more favorable backdrop in 2007. Meanwhile, an improving regulatory landscape should enable these companies to post solid earnings advances this year.

Nevertheless, the stocks here continue to lack investment appeal. Not one is ranked favorably versus the broader market for year ahead performance and none offer more than minimal 3- to 5-year appreciation potential due to capital constraints. As usual, the Water Utility industry, as a whole, ranks near the bottom of the *Value Line* investment universe for Timeliness.

INDUSTRY TIMELINESS: 95 (of 96)

Regulatory Environment

Regulatory authorities were put in place in order to maintain a balance of power between utility providers and consumers. However, administrations have been extremely consumer-conscious in recent years, leaving utility companies to pick up the slack. Rate relief case decisions were being delayed and in many instances coming back unfavorable. But, those days appear to be over. Current administrations have taken a much more business-friendly approach of late handing down quicker and generally favorable rulings. This is especially true in California, where behind the urging of Governor Schwarzenegger the California Public Utilities Commission's (CPUC) board has undergone a major facelift with adversaries being replaced with business supporters. Recent rulings augur well for utility providers such as *California Water Service Group* and *American States Water*, which both do a hefty portion of their business in the Golden State. And there may be more improvements on the way. The CPUC is reviewing a general rate case petitioning for a water revenue adjustment mechanism (RAM), which would allow recovery of revenues when actual sales are lower than adopted sales assumed in the general rate case. This would remove volatility due to weather conditions and provide some earnings stability going forward.

Infrastructure Costs

Nevertheless, maintenance costs are expected to remain extremely high, as infrastructure demands grow more stringent. Many of the current infrastructures are more than 100 years old and in need of serious upkeep, or even complete replacement in some cases. Making matters worse, the Environmental Protection Agency (EPA) continues to increase its water purification standards, given the geopolitical volatility worldwide and the threat of bio-terrorist actions on U.S. water systems. In all, infrastructure repair costs are expected to climb into the hundreds of millions of dollars over the next two decades.

This puts smaller companies in the industry at a distinct disadvantage. Many do not have the resources to meet the higher burdens and are deciding to merge with larger, more financially sound enterprises. As a result, some of the biggest water utility companies are growing bigger, faster than ever. *Aqua America*, for example, has been an acquisition machine, inking more than 100 deals in the past five years. The current environment is enabling players such as *Aqua* to increase its customer base and clearly improved its long-term prospects. With no end in sight, we expect *Aqua* to continue using current consolidation trends to grow its business via acquisitions.

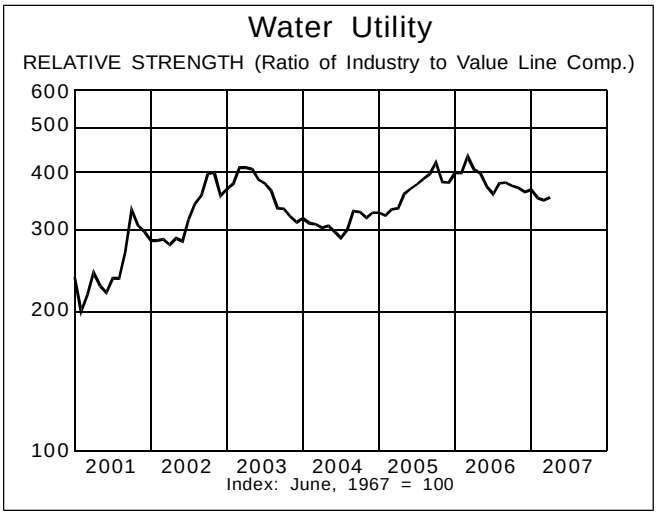
Investment Advice

We recommend that most investors look elsewhere. Despite the necessity for water, the capital intensive nature of the industry washes away any growth appeal. Each of the issues in the coming pages holds below average appreciation potential for both the coming six to 12 months and 3 to 5 years. Meanwhile, there are better income-bearing instruments on the market. Although water utility stocks have generated above-average income returns in recent years, higher interest rates have dulled their luster a bit more recently. That said, conservative investors looking to add a steady stream of income to the portfolio may want to consider *California Water*. It is ranked 2 (Above Average) for Safety and offers an above-average dividend yield. The company has raised its annual dividend for 40 consecutive years. Even still, as always, we advise all potential investors to carefully review the individual reports in the next few pages before making any investment.

Andre J. Costanza

Composite Statistics: Water Utility Industry

2003	2004	2005	2006	2007	2008		10-12
1030.0	1173.6	1256.9	1361.0	*1465*	*1660*	Revenues ($mill)	*1950*
105.9	127.1	148.3	150.1	*180*	*205*	Net Profit ($mill)	*265*
39.7%	39.1%	40.5%	*40.0%*	*40.0%*	*40.0%*	Income Tax Rate	*40.0%*
1.9%	1.0%	1.1%	*1.0%*	*1.0%*	*1.0%*	AFUDC % to Net Profit	*1.0%*
51.0%	49.1%	50.4%	*50.0%*	*50.0%*	*50.0%*	Long-Term Debt Ratio	*50.0%*
48.8%	50.7%	49.5%	*50.0%*	*50.0%*	*50.0%*	Common Equity Ratio	*50.0%*
2296.4	2543.6	3057.5	3393.6	*3675*	*4000*	Total Capital ($mill)	*5040*
3186.1	3532.5	4194.7	4587.7	*5000*	*5255*	Net Plant ($mill)	*6465*
5.9%	6.0%	6.3%	*6.0%*	*6.5%*	*6.5%*	Return on Total Cap'l	*6.5%*
8.8%	9.0%	9.8%	*9.0%*	*10.0%*	*10.5%*	Return on Shr. Equity	*10.5%*
8.8%	9.0%	9.8%	*9.0%*	*10.0%*	*10.5%*	Return on Com Equity	*10.5%*
2.7%	3.1%	3.7%	*3.0%*	*3.5%*	*4.0%*	Retained to Com Eq	*3.5%*
70%	66%	62%	*65%*	*62%*	*56%*	All Div'ds to Net Prof	*55%*
25.6	25.4	29.4				Avg Ann'l P/E Ratio	*18.0*
1.46	1.34	1.57		*Bold figures are Value Line estimates*		Relative P/E Ratio	*1.20*
2.7%	2.6%	2.1%				Avg Ann'l Div'd Yield	*2.0%*



AMER. STATES WATER NYSE-AWR

RECENT PRICE **36.70** | P/E RATIO **24.5** (Trailing: 27.6 Median: 18.0) | RELATIVE P/E RATIO **1.26** | DIV'D YLD **2.6%** | **VALUE LINE**

TIMELINESS 5 Lowered 12/1/06
SAFETY 3 New 2/4/00
TECHNICAL 3 Lowered 4/27/07
BETA .80 (1.00 = Market)

2010-12 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+35%)	*10%*
Low	35	(-5%)	*2%*

Insider Decisions

	J	J	A	S	O	N	D	J	F
to Buy	0	0	0	0	0	1	0	0	0
Options	3	0	2	0	0	1	0	0	0
to Sell	3	0	2	0	0	2	0	0	0

Institutional Decisions

	2Q2006	3Q2006	4Q2006
to Buy	67	53	59
to Sell	44	55	39
Hld's(000)	8042	8361	8944

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
High:	16.1	17.1	19.5	26.5	25.3	26.4	29.0	29.0	26.8	34.6	43.8	41.1						
Low:	12.5	13.5	14.1	14.8	16.7	19.0	20.3	21.6	20.8	24.3	30.3	35.4						

LEGENDS
1.25 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 6/02
Options: No
Shaded area indicates recession

3-for-2

Target Price Range 2010 | 2011 | 2012

80 60 50 40 30 25 20 15 10 7.5

Percent shares traded 6 4 2

% TOT. RETURN 3/07

	THIS STOCK	VL ARITH. INDEX
1 yr.	1.1	9.9
3 yr.	65.7	42.9
5 yr.	82.8	75.8

© VALUE LINE PUB., INC.

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		10-12
9.15	10.10	9.27	10.43	11.03	11.37	11.44	11.02	12.91	12.17	13.06	13.78	13.98	13.61	14.06	15.75	***15.55***	***15.80***	Revenues per sh	***17.25***
1.78	1.81	1.67	1.68	1.75	1.75	1.85	2.04	2.26	2.20	2.53	2.54	2.08	2.23	2.64	2.90	***3.10***	***3.25***	"Cash Flow" per sh	***3.60***
1.19	1.15	1.11	.95	1.03	1.13	1.04	1.08	1.19	1.28	1.35	1.34	.78	1.05	1.32	1.33	***1.55***	***1.65***	Earnings per sh [A]	***2.05***
.73	.77	.79	.80	.81	.82	.83	.84	.85	.86	.87	.87	.88	.89	.90	.91	***.94***	***.97***	Div'd Decl'd per sh [B■]	***1.06***
2.77	2.31	1.90	2.43	2.19	2.40	2.58	3.11	4.30	3.03	3.18	2.68	3.76	5.03	4.24	3.91	***3.95***	***3.95***	Cap'l Spending per sh	***4.00***
8.39	8.85	9.95	10.07	10.29	11.01	11.24	11.48	11.82	12.74	13.22	14.05	13.97	15.01	15.72	16.64	***17.80***	***19.20***	Book Value per sh	***22.25***
9.91	9.96	11.71	11.77	11.77	13.33	13.44	13.44	13.44	15.12	15.12	15.18	15.21	16.75	16.80	17.05	***18.00***	***19.00***	Common Shs Outst'g [C]	***22.00***
8.8	10.6	13.4	12.8	11.6	12.6	14.5	15.5	17.1	15.9	16.7	18.3	31.9	23.2	21.9	27.7	***Bold figures are Value Line estimates***		Avg Ann'l P/E Ratio	***21.0***
.56	.64	.79	.84	.78	.79	.84	.81	.97	1.03	.86	1.00	1.82	1.23	1.17	1.47			Relative P/E Ratio	***1.40***
7.0%	6.3%	5.3%	6.6%	6.7%	5.8%	5.5%	5.0%	4.2%	4.2%	3.9%	3.6%	3.5%	3.6%	3.1%	2.4%			Avg Ann'l Div'd Yield	***2.5%***
153.8	148.1	173.4	184.0	197.5	209.2	212.7	228.0	236.2	268.6	***280***	***300***	Revenues ($mill)	***380***
14.1	14.6	16.1	18.0	20.4	20.3	11.9	16.5	22.5	23.1	***28.0***	***32.0***	Net Profit ($mill)	***45.0***
41.1%	40.9%	46.0%	45.7%	43.0%	38.9%	43.5%	37.4%	47.0%	40.5%	***41.0%***	***41.0%***	Income Tax Rate	***42.0%***
- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	***Nil***	***Nil***	AFUDC % to Net Profit	***Nil***
43.0%	43.6%	51.0%	47.5%	54.9%	52.0%	52.0%	47.7%	50.4%	48.6%	***49.5%***	***49.0%***	Long-Term Debt Ratio	***49.5%***
56.3%	55.7%	48.4%	51.9%	44.7%	48.0%	48.0%	52.3%	49.6%	51.4%	***50.5%***	***51.0%***	Common Equity Ratio	***50.5%***
268.4	277.1	328.2	371.1	447.6	444.4	442.3	480.4	532.5	551.6	***635***	***720***	Total Capital ($mill)	***965***
383.6	414.8	449.6	509.1	539.8	563.3	602.3	664.2	713.2	750.6	***795***	***835***	Net Plant ($mill)	***975***
6.9%	7.0%	6.6%	6.4%	6.1%	6.5%	4.6%	5.2%	5.4%	6.0%	***6.0%***	***6.0%***	Return on Total Cap'l	***6.5%***
9.2%	9.4%	10.0%	9.2%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	***8.5%***	***9.0%***	Return on Shr. Equity	***9.0%***
9.2%	9.4%	10.1%	9.3%	10.1%	9.5%	5.6%	6.6%	8.5%	8.1%	***8.5%***	***9.0%***	Return on Com Equity	***9.0%***
1.8%	2.1%	2.9%	3.0%	3.6%	3.3%	NMF	1.0%	2.8%	2.7%	***3.5%***	***3.5%***	Retained to Com Eq	***4.5%***
80%	78%	72%	68%	65%	65%	113%	84%	67%	67%	***60%***	***58%***	All Div'ds to Net Prof	***52%***

CAPITAL STRUCTURE as of 12/31/06
Total Debt $300.4 mill. **Due in 5 Yrs** $3.3 mill.
LT Debt $267.8 mill. **LT Interest** $24.0 mill.
(LT interest earned: 3.1x; total interest coverage: 2.9x) (49% of Cap'l)

Leases, Uncapitalized: None
Pension Assets-12/06 $64.3 mill.
Oblig. $86.1 mill.
Pfd Stock None. **Pfd Div'd** None.

Common Stock 17,049,137 shs.
MARKET CAP: $625 million (Small Cap)

CURRENT POSITION ($MILL.)	2004	2005	12/31/06
Cash Assets	4.3	13.0	3.2
Receivables	14.3	13.3	14.8
Inventory (Avg Cst)	1.5	1.4	1.6
Other	32.9	41.2	44.8
Current Assets	53.0	68.9	64.4
Accts Payable	18.2	19.7	24.0
Debt Due	45.9	27.6	32.6
Other	22.2	30.3	29.3
Current Liab.	86.3	77.6	85.9
Fix. Chg. Cov.	246%	325%	*325%*

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '03-'05 to '10-'12
Revenues	3.0%	3.0%	*3.0%*
"Cash Flow"	3.0%	1.5%	*5.5%*
Earnings	- -	-2.5%	*9.0%*
Dividends	1.0%	1.0%	*3.0%*
Book Value	4.0%	4.5%	*6.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2004	46.7	59.3	69.0	53.0	228.0
2005	49.8	60.5	68.1	57.8	236.2
2006	60.6	62.1	73.6	66.3	268.6
2007	***63.0***	***69.0***	***79.0***	***69.0***	***280***
2008	***67.0***	***75.0***	***85.0***	***73.0***	***300***

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2004	.08	.30	.52	.15	1.05
2005	.22	.34	.47	.29	1.32
2006	.35	.36	.32	.30	1.33
2007	***.35***	***.40***	***.45***	***.35***	***1.55***
2008	***.37***	***.43***	***.48***	***.37***	***1.65***

Calendar	QUARTERLY DIVIDENDS PAID [B■] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2003	.221	.221	.221	.221	.88
2004	.221	.221	.221	.225	.89
2005	.225	.225	.225	.225	.90
2006	.225	.225	.225	.235	.91
2007	.235				

BUSINESS: American States Water Co. operates as a holding company. Through its principal subsidiary, Golden State Water Company, it supplies water to more than 250,000 customers in 75 communities in 10 counties. Service areas include the greater metropolitan areas of Los Angeles and Orange Counties. The company also provides electric utility services to nearly 23,250 customers in the city of Big Bear Lake and in areas of San Bernardino County. Acquired Chaparral City Water of Arizona (10/00). Has roughly 555 employees. Officers & directors own 3.1% of common stock (4/07 Proxy). Chairman: Lloyd Ross. President & CEO: Floyd Wicks. Incorporated: CA. Addr.: 630 East Foothill Boulevard, San Dimas, CA 91773. Tele.: 909-394-3600. Web: www.aswater.com.

Regulatory improvements augur well for American States Water. The California Public Utilities Commission (CPUC) is responsible for overseeing utility companies and their business practices in the Golden State. After years of handing down unfavorable decisions in a delayed fashion, it appears as though the board has taken a turn for the better. Under Governor Schwarzenegger's watch, it has employed a much more business-friendly approach, issuing more favorable decisions in much shorter time. Also, the CPUC announced that it has eliminated its earnings test on balancing account cost recovery, enabling Cal-based water utilities to recover costs even if they were earning over their allowed ROE in the district. We view these developments as positives for AWR. It has a number of GRC cases being reviewed that may well add to our current earnings estimates of $1.55 for this year and $1.65 for 2008.

There may be even more good news on the horizon. A fellow Cal water utility provider filed a general rate case last year petitioning the CPUC to enact a water revenue adjustment mechanism (RAM). If enacted, RAM would allow recovery of refund water revenues when actual sales are below adopted water sales included in the GRC assumptions. The CPUC has asked the company to refile its request, sparking speculation that the commission may back such a practice. Although the adoption of this methodology would provide significant upside to our estimates, as per *Value Line* protocol, we will not account for such until a decision is finalized.

Government contracts provide further optimism. The military has expressed its interest in outsourcing water and wastewater operations at all of its bases. American has already inked deals for a couple of these bases, and additional deals could add upside to our 3- to 5-year projections.

Still, most investors will want to take a pass on this untimely issue. We are concerned that infrastructure costs will increase at too fast a rate over the next couple of years and offset any gains we envision from the aforementioned initiatives. Therefore, the stock holds limited 3- to 5-year appreciation potential.

Andre J. Costanza *April 27, 2007*

(A) Primary earnings. Excludes nonrecurring gains: '91, 73¢; '92, 13¢; '04, 14¢; '05, 25¢; '06, 6¢. Quarterly earnings may not sum due to change in share count. Next earnings report due early May.
(B) Dividends historically paid in early March, June, September, December. ■ Div'd reinvestment plan available.
(C) In millions, adjusted for splits.

Company's Financial Strength	B++
Stock's Price Stability	75
Price Growth Persistence	85
Earnings Predictability	60

CALIFORNIA WATER NYSE-CWT

RECENT PRICE **40.72** | P/E RATIO **25.9** (Trailing: 30.4 Median: 19.0) | RELATIVE P/E RATIO **1.34** | DIV'D YLD **2.8%** | **VALUE LINE**

TIMELINESS **5** Lowered 8/11/06
SAFETY **2** Lowered 8/11/95
TECHNICAL **3** Lowered 1/26/07
BETA .90 (1.00 = Market)

2010-12 PROJECTIONS

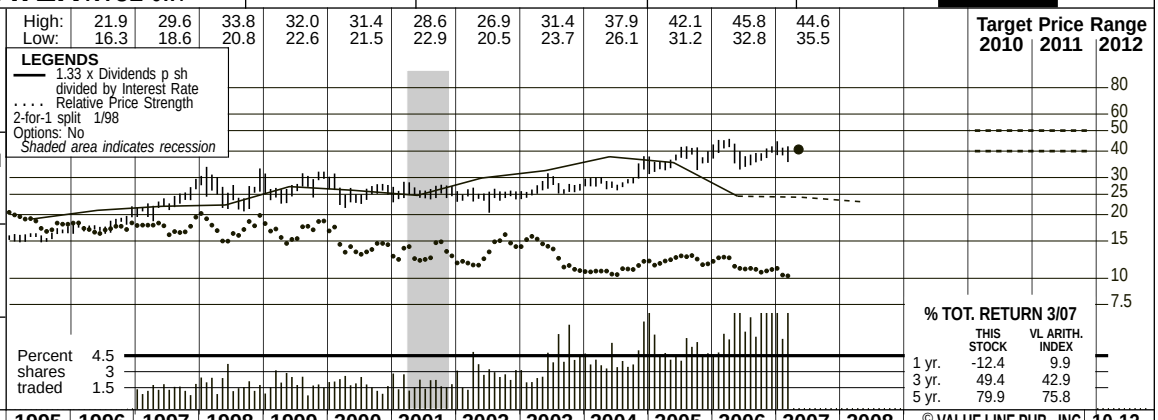
	Price	Gain	Ann'l Total Return
High	50	(+25%)	8%
Low	40	(Nil)	2%

Insider Decisions

	J	J	A	S	O	N	D	J	F
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	2Q2006	3Q2006	4Q2006
to Buy	42	35	65
to Sell	39	37	26
Hld's(000)	5714	5853	8338



1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	© VALUE LINE PUB., INC.	10-12
11.18	12.29	13.34	12.59	13.17	14.48	15.48	14.76	15.96	16.16	16.26	17.33	16.37	17.18	17.44	16.20	*17.40*	*18.15*	Revenues per sh	*21.30*
1.98	1.92	2.25	2.02	2.07	2.50	2.92	2.60	2.75	2.52	2.20	2.65	2.51	2.83	3.03	2.76	*3.20*	*3.45*	"Cash Flow" per sh	*3.90*
1.21	1.09	1.35	1.22	1.17	1.51	1.83	1.45	1.53	1.31	.94	1.25	1.21	1.46	1.47	1.34	*1.60*	*1.75*	Earnings per sh [A]	*2.15*
.90	.93	.96	.99	1.02	1.04	1.06	1.07	1.09	1.10	1.12	1.12	1.12	1.13	1.14	1.15	*1.16*	*1.17*	Div'd Decl'd per sh [B] ■	*1.20*
3.03	3.09	2.53	2.26	2.17	2.83	2.61	2.74	3.44	2.45	4.09	5.82	4.39	3.73	4.01	4.28	*4.35*	*4.50*	Cap'l Spending per sh	*4.35*
10.35	10.51	10.90	11.56	11.72	12.22	13.00	13.38	13.43	12.90	12.95	13.12	14.44	15.66	15.79	18.31	*19.05*	*19.55*	Book Value per sh [C]	*21.30*
11.38	11.38	11.38	12.49	12.54	12.62	12.62	12.62	12.94	15.15	15.18	15.18	16.93	18.37	18.39	20.66	*21.00*	*21.50*	Common Shs Outst'g [D]	*23.00*
11.2	14.1	13.6	14.1	13.7	11.9	12.6	17.8	17.8	19.6	27.1	19.8	22.1	20.1	24.9	29.6	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*21.0*
.72	.86	.80	.92	.92	.75	.73	.93	1.01	1.27	1.39	1.08	1.26	1.06	1.33	1.57			Relative P/E Ratio	*1.40*
6.6%	6.1%	5.2%	5.8%	6.4%	5.8%	4.6%	4.2%	4.0%	4.3%	4.4%	4.5%	4.2%	3.9%	3.1%	3.4%			Avg Ann'l Div'd Yield	*2.7%*
195.3	186.3	206.4	244.8	246.8	263.2	277.1	315.6	320.7	334.7	*365*	*390*	Revenues ($mill)	*490*
23.3	18.4	19.9	20.0	14.4	19.1	19.4	26.0	27.2	25.6	*35.0*	*40.0*	Net Profit ($mill)	*50.0*
37.4%	36.4%	37.9%	42.3%	39.4%	39.7%	39.9%	39.6%	42.4%	39.7%	*41.0%*	*41.0%*	Income Tax Rate	*41.0%*
--	--	--	--	--	--	10.3%	3.2%	3.3%	--	*Nil*	*Nil*	AFUDC % to Net Profit	*Nil*
45.4%	44.2%	46.9%	48.9%	50.3%	55.3%	50.2%	48.6%	48.3%	43.3%	*44.5%*	*46.5%*	Long-Term Debt Ratio	*48.5%*
53.5%	54.7%	52.0%	50.2%	48.8%	44.0%	49.1%	50.8%	51.1%	56.2%	*55.0%*	*53.0%*	Common Equity Ratio	*51.0%*
306.7	308.6	333.8	388.8	402.7	453.1	498.4	565.9	568.1	673.6	*730*	*790*	Total Capital ($mill)	*965*
460.4	478.3	515.4	582.0	624.3	697.0	759.5	800.3	862.7	941.5	*1000*	*1060*	Net Plant ($mill)	*1240*
9.4%	7.8%	7.8%	6.8%	5.3%	5.9%	5.6%	6.1%	6.3%	*5.2%*	*6.5%*	*6.5%*	Return on Total Cap'l	*7.0%*
13.9%	10.7%	11.2%	10.0%	7.2%	9.4%	7.8%	8.9%	9.3%	6.7%	*8.5%*	*9.5%*	Return on Shr. Equity	*10.0%*
14.1%	10.8%	11.4%	10.1%	7.2%	9.5%	7.9%	9.0%	9.3%	6.8%	*8.5%*	*9.5%*	Return on Com Equity	*10.0%*
6.0%	2.8%	3.5%	1.8%	NMF	1.0%	.7%	2.1%	2.1%	.5%	*2.5%*	*3.5%*	Retained to Com Eq	*4.5%*
58%	74%	70%	82%	119%	90%	91%	77%	78%	93%	*70%*	*63%*	All Div'ds to Net Prof	*55%*

CAPITAL STRUCTURE as of 12/31/06
Total Debt $293.6 mill. **Due in 5 Yrs** $11.9 mill.
LT Debt $291.8 mill. **LT Interest** $22.5 mill.

(LT interest earned: ***3.5***x; total int. cov.: ***3.2***x)

Pension Assets-12/06 $78.4 mill.
Oblig. $109.1 mill.
Pfd Stock $3.5 mill. **Pfd Div'd** $.15 mill.
139,000 shares, 4.4% cumulative ($25 par).

Common Stock 20,656,699 shs.
as of 3/6/07
MARKET CAP: $850 million (Small Cap)

CURRENT POSITION ($MILL.)	2004	2005	12/31/06
Cash Assets	18.8	9.5	60.3
Other	51.6	42.7	49.3
Current Assets	70.4	52.2	109.6
Accts Payable	19.8	36.1	33.1
Debt Due	1.1	1.1	1.8
Other	36.3	39.6	35.3
Current Liab.	57.2	76.8	70.2
Fix. Chg. Cov.	338%	361%	317%

ANNUAL RATES (of change (per sh))	Past 10 Yrs.	Past 5 Yrs.	Est'd '03-'05 to '10-'12
Revenues	2.5%	1.5%	*3.5%*
"Cash Flow"	3.0%	1.5%	*5.0%*
Earnings	1.0%	-0.5%	*6.5%*
Dividends	1.5%	1.0%	*1.0%*
Book Value	3.0%	3.0%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	60.2	88.9	97.1	69.4	315.6
2005	60.3	81.5	101.1	77.8	320.7
2006	65.2	81.1	107.8	80.6	334.7
2007	*70.0*	*90.0*	*120*	*85.0*	*365*
2008	*75.0*	*97.0*	*128*	*90.0*	*390*

Calendar	EARNINGS PER SHARE [A] [E] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.08	.59	.59	.20	1.46
2005	.03	.41	.71	.32	1.47
2006	.04	.31	.68	.31	1.34
2007	*.08*	*.42*	*.76*	*.34*	*1.60*
2008	*.10*	*.45*	*.82*	*.38*	*1.75*

Calendar	QUARTERLY DIVIDENDS PAID [B] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2003	.281	.281	.281	.281	1.12
2004	.283	.283	.283	.283	1.13
2005	.285	.285	.285	.285	1.14
2006	.2875	.2875	.2875	.2875	1.15
2007	.290				

BUSINESS: California Water Service Group provides regulated and nonregulated water service to over 2 million people (483,900 customers) in 83 communities in California, Washington, New Mexico, and Hawaii. Main service areas: San Francisco Bay area, Sacramento Valley, Salinas Valley, San Joaquin Valley & parts of Los Angeles. Acquired National Utility Company (5/04); Rio Grande Corp. (11/00). Revenue breakdown, '06: residential, 70%; business, 18%; public authorities, 5%; industrial, 5%; other, 2%. '06 reported deprec. rate: 3.3%. Has roughly 870 employees. Chairman: Robert W. Foy. President & CEO: Peter C. Nelson. Inc.: Delaware. Address: 1720 North First Street, San Jose, California 95112-4598. Telephone: 408-367-8200. Internet: www.calwater.com.

California Water Service Group appears poised for a strong bottom-line rebound this year. Although the water utility provider had some trouble in 2006, we expect better weather conditions, especially in the first half of the year, to help it bounce back. Meanwhile, there are better regulatory practices in play now. The California Public Utilities Commission (CPUC), which is responsible for maintaining a balance between consumers and Cal-based utilities, recently awarded CWT an allowed ROE of 10.2% on its general rate case regarding 24 districts. The ruling was in line with what we expected and points to an improving regulatory environment in the state. This augurs well for the company's prospects, as it submits a general rate case to recover higher non-operational costs for eight of its districts every three years, and has a few cases currently being reviewed. Against this backdrop, we look for CWT to post share earnings of $1.60 this year, representing a 19% gain.

Further regulatory improvements should boost 2008 earnings. Given the CPUC's more business-friendly nature, there is a good chance that the board will enact some of the reformations proposed in the Water Action Plan that are on the table. A decision is expected in the second half of this year. We are introducing a 2008 share-net estimate of $1.75.

Capital constraints remain a problem, though. CWT is making heavy investments in its current systems. Indeed, capital expenditures have increased significantly in recent years and are likely to remain high for the foreseeable future. Unfortunately, it does not have enough cash on hand to foot the bill, making additional stock and debt offerings necessary.

Growth-minded investors will want to look elsewhere. The stock is ranked 5 (Lowest) for Timeliness and offers limited 3- to 5-year appreciation potential, given its financing problems.

That said, those looking for a steady stream of income may like what they see. Despite its capital constraints, CWT recently raised its annual dividend, marking the 40th consecutive year of increase. Although there are higher-yielding instruments out there, CWT's 2 (Above Average) Safety rank adds appeal.

Andre J. Costanza *April 27, 2007*

(A) Basic EPS. Excl. nonrecurring gain (loss): '00, (7¢); '01, 4¢; 02, 8¢. Next earnings report due early May.

(B) Dividends historically paid in mid-Feb., May, Aug., and Nov. ■ Div'd reinvestment plan available.

(C) Incl. deferred charges. In '06: $69.5 mill., $3.36/sh.
(D) In millions, adjusted for split.
(E) May not total due to change in shares.

Company's Financial Strength	B++
Stock's Price Stability	80
Price Growth Persistence	80
Earnings Predictability	70

SOUTHWEST WATER NDQ-SWWC

RECENT PRICE **14.24** | P/E RATIO **29.7** (Trailing: 35.6 Median: 19.0) | RELATIVE P/E RATIO **1.53** | DIV'D YLD **1.7%** | **VALUE LINE**

TIMELINESS 3 Raised 3/30/07
SAFETY 3 New 10/28/05
TECHNICAL 3 Lowered 2/16/07
BETA .90 (1.00 = Market)

2010-12 PROJECTIONS

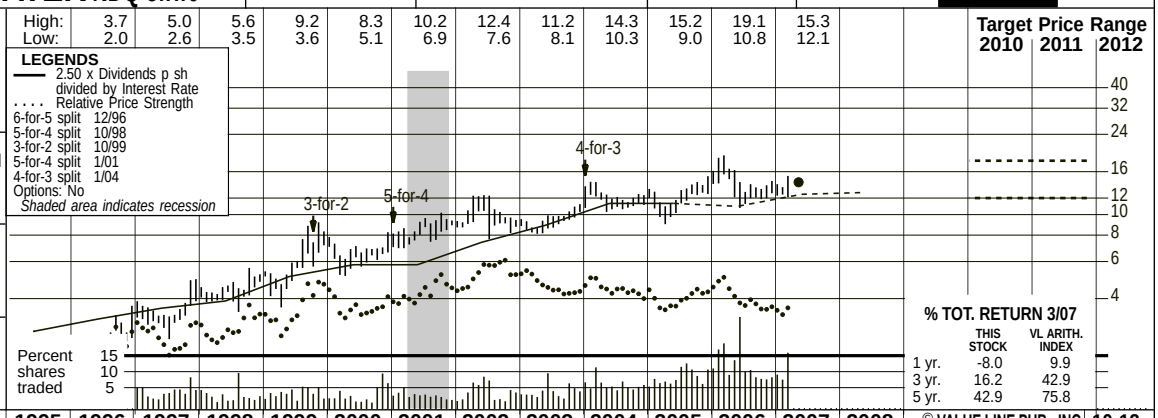
	Price	Gain	Ann'l Total Return
High	18	(+25%)	8%
Low	12	(-15%)	-1%

Insider Decisions

	J	J	A	S	O	N	D	J	F
to Buy	0	0	1	0	0	0	0	0	0
Options	0	1	2	1	1	2	0	0	1
to Sell	1	1	3	1	2	2	1	1	1

Institutional Decisions

	2Q2006	3Q2006	4Q2006
to Buy	33	30	40
to Sell	32	20	16
Hld's(000)	8415	9034	10780



Target Price Range

2010	2011	2012
40	32	24
16	12	10
8	6	4

% TOT. RETURN 3/07

	THIS STOCK	VL ARITH. INDEX
1 yr.	-8.0	9.9
3 yr.	16.2	42.9
5 yr.	42.9	75.8

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	© VALUE LINE PUB., INC.	10-12
3.34	3.77	4.03	4.20	4.84	5.31	5.61	5.63	6.16	7.49	8.15	9.12	10.70	9.23	9.10	9.42	*9.60*	*10.00*	Revenues per sh	*11.00*
.28	.44	.38	.38	.44	.46	.53	.59	.65	.76	.87	.86	.91	.67	.78	.85	*.95*	*1.05*	"Cash Flow" per sh	*1.35*
.02	.19	.08	.09	.12	.15	.21	.25	.31	.38	.42	.39	.44	.23	.34	.40	*.45*	*.50*	Earnings per sh [A]	*.70*
.18	.18	.14	.08	.08	.09	.09	.10	.11	.13	.14	.15	.16	.18	.20	.21	*.24*	*.26*	Div'd Decl'd per sh [B]	*.34*
.39	.42	.60	.72	.84	.95	.74	.79	.53	.55	1.06	1.78	1.14	1.26	1.66	1.87	*1.90*	*1.95*	Cap'l Spending per sh	*2.05*
2.41	2.42	2.31	2.31	2.45	2.40	2.52	2.70	3.05	3.44	3.84	4.27	4.90	6.17	6.49	6.98	*7.60*	*8.45*	Book Value per sh [D]	*10.50*
11.60	11.80	11.97	12.13	11.74	12.45	12.65	12.83	13.12	13.99	14.17	14.35	16.17	20.36	22.33	23.80	*25.00*	*26.00*	Common Shs Outst'g [C]	*30.00*
NMF	14.5	35.8	22.3	14.6	16.5	16.9	17.2	19.6	17.0	19.8	24.8	21.2	51.6	35.5	34.8	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*21.0*
NMF	.88	2.11	1.46	.98	1.03	.97	.89	1.12	1.11	1.01	1.35	1.21	2.73	1.89	1.88			Relative P/E Ratio	*1.40*
5.5%	6.6%	4.7%	4.2%	4.7%	3.4%	2.7%	2.3%	1.8%	2.0%	1.7%	1.5%	1.7%	1.5%	1.6%	1.5%			Avg Ann'l Div'd Yield	*2.3%*
						71.0	72.2	80.9	104.7	115.5	130.8	173.0	188.0	203.2	224.2	*240*	*260*	Revenues ($mill)	*330*
						2.6	3.4	4.2	5.4	6.2	6.0	7.2	4.5	7.3	9.4	*12.0*	*14.0*	Net Profit ($mill)	*22.0*
						41.6%	39.5%	39.0%	37.0%	36.0%	34.9%	35.9%	36.1%	36.0%	35.0%	*36.0%*	*36.0%*	Income Tax Rate	*35.5%*
						- -	- -	- -	- -	14.4%	3.2%	- -	11.0%	9.5%	*12.5%*	*11.5%*	*12.0%*	AFUDC % to Net Profit	*12.5%*
						47.9%	48.7%	45.2%	48.8%	51.4%	56.7%	47.9%	47.9%	44.7%	43.6%	*44.0%*	*44.0%*	Long-Term Debt Ratio	*43.5%*
						51.3%	50.5%	54.1%	50.7%	48.2%	42.9%	51.8%	52.0%	55.1%	56.4%	*56.0%*	*56.0%*	Common Equity Ratio	*56.5%*
						62.2	68.5	73.9	95.0	113.0	142.8	152.8	242.0	262.9	295.1	*340*	*380*	Total Capital ($mill)	*560*
						102.1	109.2	113.7	157.8	171.1	203.9	219.5	302.6	344.8	389.6	*450*	*510*	Net Plant ($mill)	*750*
						6.8%	7.1%	7.6%	7.6%	7.6%	5.8%	6.2%	3.1%	4.1%	4.6%	*4.5%*	*5.0%*	Return on Total Cap'l	*5.0%*
						8.0%	9.5%	10.3%	11.1%	11.4%	9.7%	9.0%	3.6%	5.0%	5.6%	*6.0%*	*6.0%*	Return on Shr. Equity	*7.0%*
						8.1%	9.6%	10.4%	11.1%	11.4%	9.7%	9.1%	3.6%	5.0%	5.6%	*6.0%*	*6.0%*	Return on Com Equity	*7.0%*
						4.5%	6.0%	7.0%	7.8%	7.8%	6.3%	5.8%	.8%	2.1%	2.6%	*3.0%*	*3.0%*	Retained to Com Eq	*3.5%*
						45%	38%	33%	31%	32%	36%	36%	78%	58%	53%	*51%*	*51%*	All Div'ds to Net Prof	*54%*

CAPITAL STRUCTURE as of 12/31/06
Total Debt $130.0 mill. **Due in 5 Yrs** $41.0 mill.
LT Debt $128.6 mill. **LT Interest** $8.0 mill.
(Total interest coverage: 2.7x) (44% of Cap'l)

Leases, Uncapitalized: Annual rentals $6.7 mill.
Pension Liability None

Pfd Stock $.458 mill. **Pfd Div'd** $.024 mill.

Common Stock 23,802,000 shs.

MARKET CAP: $350 million (Small Cap)

CURRENT POSITION ($MILL.)	2004	2005	12/31/06
Cash Assets	1.9	3.0	4.3
Receivables	23.9	26.5	27.5
Inventory (Avg Cst)	1.9	- -	- -
Other	17.6	18.2	16.5
Current Assets	45.3	47.7	48.3
Accts Payable	12.3	10.0	12.7
Debt Due	3.4	9.5	1.4
Other	20.0	21.1	21.7
Current Liab.	35.7	40.6	35.8

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '03-'05 to '10-'12
Revenues	8.5%	8.5%	*2.0%*
"Cash Flow"	7.0%	3.5%	*8.0%*
Earnings	13.5%	1.5%	*11.0%*
Dividends	6.0%	10.0%	*9.5%*
Book Value	9.5%	14.0%	*8.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2004	39.8	45.7	55.0	47.5	188.0
2005	45.2	51.3	54.7	52.0	203.2
2006	50.8	55.4	60.1	57.9	224.2
2007	*55.0*	*60.0*	*65.0*	*60.0*	*240*
2008	*62.0*	*66.0*	*68.0*	*64.0*	*260*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun. 30	Sep. 30	Dec. 31	Full Year
2004	- -	.13	.11	d.01	.23
2005	d.01	.15	.14	.06	.34
2006	.03	.08	.16	.13	.40
2007	*.05*	*.14*	*.16*	*.10*	*.45*
2008	*.06*	*.15*	*.18*	*.11*	*.50*

Calendar	QUARTERLY DIVIDENDS PAID [B] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2003	.042	.042	.042	.046	.17
2004	.046	.046	.046	.050	.19
2005	.048	.048	.048	.052	.20
2006	.052	.052	.052	.058	.21
2007	.058	.058			

BUSINESS: Southwest Water Company provides a broad range of services including water production, treatment and distribution; wastewater collection and treatment; utility billing and collection; utility infrastructure construction management; and public works services. It operates out of two groups, Utility (38% of 2006 revenues) and Services (62%). Utility owns and manages rate-regulated public water utilities in California, New Mexico, Oklahoma, and Texas. Services does mostly maintenance work on a contract basis. Off. & dir. own 6.3% of com. shs.; Stein Roe Investment Council, 9.7% (4/07 proxy). CEO and Chairman: Mark Swatek. Inc.: DE. Addr.: One Wilshire Building, 624 S. Grand Ave. Ste. 2900, Los Angeles, CA 90017. Tel.: 213-929-1800. Internet: www.swwc.com.

Southwest Water Company is performing well. The Utility Group, which accounts for less than half of total revenues, continues to make sizable bottom-line contributions. Income from this unit advanced about 15% in 2006. Much of the strength was due to warmer temperatures and increased water consumption. Rates also rose, thanks to favorable regulatory environments in California and Texas. We expect the company to file for higher rates at several facilities in 2007, lifting this unit further.

The Services Group is improving as well. Revenue at this segment continues to benefit from the addition of new customers and expanded service offerings. Although the operating margin at this division has been a bit narrow in the past, profitability is starting to improve. This likely reflects better contract terms and lower levels of spending.

The company continues to make acquisitions. In March, Southwest Water announced that it had purchased five water companies and waste water facilities located in northern Mississippi. There are also some acquisitions in progress in Alabama. By purchasing businesses located outside of the California area, Southwest Water should be able to reduce its dependence on the state's regulatory agencies and weather climate. Contributions from upcoming acquisitions will not be included in our figures until these transactions are finalized.

We expect earnings to make steady, but moderate, advances for the next few years. We are leaving our earnings estimate unchanged for 2007, and introducing an estimate of $0.50 per diluted share for 2008. In addition to improved operations, results should benefit from restructuring efforts. Management plans to consolidate several subsidiaries in order to trim legal and accounting costs. Elsewhere, there will probably be a review of the employee compensation program.

These neutrally ranked shares have below-average appreciation potential for the next 3 to 5 years. The company raised its quarterly dividend by about 12% in the December period. However, the issue's dividend yield is still not too attractive, despite the considerable increase.

Adam Rosner *April 27, 2007*

(A) Diluted earnings. Excludes nonrecurring gains (losses): '00, (3¢); '01, (5¢); '02, 1¢; '05, (23¢). Next earnings report due early May.
(B) Dividends historically paid in late January, April, July, and October.
(C) In millions, adjusted for splits.
(D) Includes intangibles. In 2006: $36.0 million, $1.51/share.

Company's Financial Strength	B
Stock's Price Stability	60
Price Growth Persistence	75
Earnings Predictability	55

AQUA AMERICA NYSE-WTR

RECENT PRICE **23.37** | P/E RATIO **29.6** (Trailing: 33.4 / Median: 23.0) | RELATIVE P/E RATIO **1.53** | DIV'D YLD **2.1%** | **VALUE LINE**

TIMELINESS 4 Raised 3/9/07
SAFETY 3 Lowered 8/1/03
TECHNICAL 3 Lowered 12/22/06
BETA .90 (1.00 = Market)

2010-12 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	30	(+30%)	9%
Low	19	(-20%)	-2%

Insider Decisions

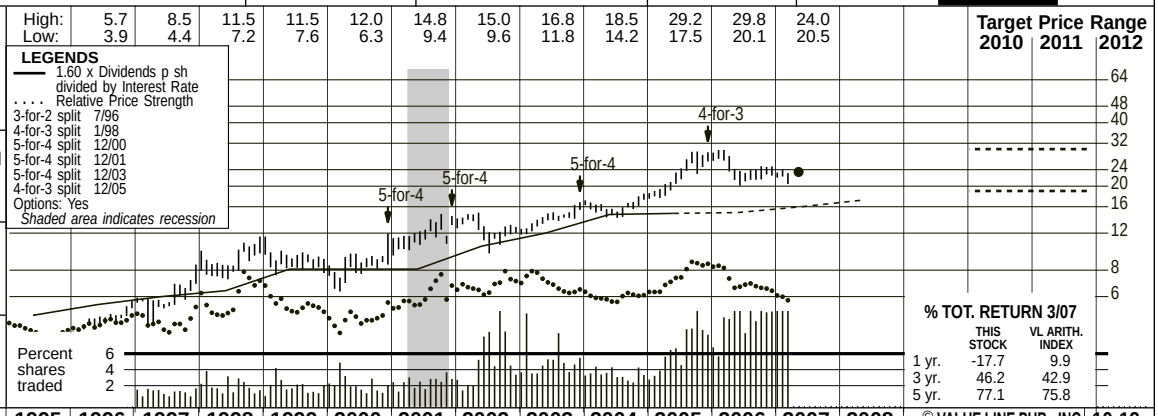
	J	J	A	S	O	N	D	J	F
to Buy	0	0	0	0	0	0	0	0	0
Options	0	1	0	0	2	4	2	0	1
to Sell	0	1	0	0	2	3	2	0	1

Institutional Decisions

	2Q2006	3Q2006	4Q2006
to Buy	131	119	122
to Sell	105	84	91
Hld's(000)	40896	44837	51814

High: 5.7 8.5 11.5 11.5 12.0 14.8 15.0 16.8 18.5 29.2 29.8 24.0
Low: 3.9 4.4 7.2 7.6 6.3 9.4 9.6 11.8 14.2 17.5 20.1 20.5

LEGENDS
1.60 x Dividends p sh divided by Interest Rate
.... Relative Price Strength
3-for-2 split 7/96
4-for-3 split 1/98
5-for-4 split 12/00
5-for-4 split 12/01
5-for-4 split 12/03
4-for-3 split 12/05
Options: Yes
Shaded area indicates recession



Target Price Range 2010 | 2011 | 2012
64 48 40 32 24 20 16 12 8 6

% TOT. RETURN 3/07

	THIS STOCK	VL ARITH. INDEX
1 yr.	-17.7	9.9
3 yr.	46.2	42.9
5 yr.	77.1	75.8

1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	© VALUE LINE PUB., INC.	10-12
2.14	1.82	1.70	1.82	1.84	1.86	2.02	2.09	2.41	2.46	2.70	2.85	2.97	3.48	3.85	4.03	*4.35*	*4.65*	Revenues per sh	*5.35*
.45	.39	.42	.42	.47	.50	.56	.61	.72	.76	.86	.94	.96	1.09	1.21	1.26	*1.40*	*1.50*	"Cash Flow" per sh	*1.80*
.25	.24	.24	.26	.29	.30	.34	.40	.42	.47	.51	.54	.57	.64	.71	.70	*.80*	*.90*	Earnings per sh [A]	*1.05*
.19	.20	.21	.21	.22	.23	.24	.26	.27	.28	.30	.32	.35	.37	.40	.44	*.48*	*.55*	Div'd Decl'd per sh [B]■	*.70*
.54	.60	.47	.46	.52	.48	.58	.82	.90	1.16	1.09	1.20	1.32	1.54	1.84	2.05	*2.10*	*2.15*	Cap'l Spending per sh	*2.30*
2.07	2.09	2.29	2.41	2.46	2.69	2.84	3.21	3.42	3.85	4.15	4.36	5.34	5.89	6.30	6.96	*7.15*	*7.45*	Book Value per sh	*9.30*
41.42	51.20	59.40	59.77	63.74	65.75	67.47	72.20	106.80	111.82	113.97	113.19	123.45	127.18	128.97	132.33	*134.00*	*136.00*	Common Shs Outst'g [C]	*140.00*
10.8	12.5	14.4	13.5	12.0	15.6	17.8	22.5	21.2	18.2	23.6	23.6	24.5	25.1	31.8	34.7	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*23.0*
.69	.76	.85	.89	.80	.98	1.03	1.17	1.21	1.18	1.21	1.29	1.40	1.33	1.69	1.88			Relative P/E Ratio	*1.55*
7.2%	6.8%	5.9%	6.0%	6.2%	4.9%	3.9%	2.9%	3.0%	3.3%	2.5%	2.5%	2.5%	2.3%	1.8%	1.9%			Avg Ann'l Div'd Yield	*2.9%*
136.2	151.0	257.3	275.5	307.3	322.0	367.2	442.0	496.8	533.5	*580*	*630*	Revenues ($mill)	*750*
23.2	28.8	45.0	50.7	58.5	62.7	67.3	80.0	91.2	92.0	*105*	*120*	Net Profit ($mill)	*150*
40.6%	40.5%	38.4%	38.9%	39.3%	38.5%	39.3%	39.4%	38.4%	39.6%	*39.5%*	*39.0%*	Income Tax Rate	*39.0%*
--	--	--	--	--	--	--	--	2.9%	*2.0%*	*2.0%*	*2.0%*	AFUDC % to Net Profit	*2.0%*
54.4%	52.7%	52.9%	52.0%	52.2%	54.2%	51.4%	50.0%	52.0%	50.8%	*51.0%*	*52.0%*	Long-Term Debt Ratio	*51.0%*
44.8%	46.6%	46.7%	47.8%	47.7%	45.8%	48.6%	50.0%	48.0%	49.2%	*49.0%*	*48.0%*	Common Equity Ratio	*49.5%*
427.2	496.6	782.7	901.1	990.4	1076.2	1355.7	1497.3	1690.4	1873.3	*1970*	*2110*	Total Capital ($mill)	*2550*
534.5	609.8	1135.4	1251.4	1368.1	1490.8	1824.3	2069.8	2280.0	2506.0	*2700*	*2850*	Net Plant ($mill)	*3500*
7.4%	7.6%	7.6%	7.4%	7.8%	7.6%	6.4%	6.7%	6.9%	6.5%	*7.0%*	*7.0%*	Return on Total Cap'l	*7.5%*
11.9%	12.3%	12.2%	11.7%	12.3%	12.7%	10.2%	10.7%	11.2%	10.0%	*11.0%*	*11.5%*	Return on Shr. Equity	*11.5%*
12.0%	12.4%	12.3%	11.7%	12.4%	12.7%	10.2%	10.7%	11.2%	10.0%	*11.0%*	*11.5%*	Return on Com Equity	*11.5%*
3.6%	4.5%	4.3%	4.7%	5.1%	5.2%	4.2%	4.6%	4.9%	3.7%	*4.0%*	*4.5%*	Retained to Com Eq	*4.0%*
70%	64%	65%	60%	59%	59%	59%	57%	56%	63%	*63%*	*64%*	All Div'ds to Net Prof	*66%*

CAPITAL STRUCTURE as of 12/31/06
Total Debt $1102.1 mill. **Due in 5 Yrs** $143.3 mill.
LT Debt $951.7 mill. **LT Interest** $55.0 mill.
(LT interest earned: 3.6x; total interest coverage: 3.4x) (50% of Cap'l)

Pension Assets-12/06 $126.5 mill.
Oblig. $178.3 mill.

Pfd Stock None
Common Stock 132,325,690 shares

MARKET CAP: $3.1 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2004	2005	12/31/06
Cash Assets	13.1	11.9	44.0
Receivables	64.5	62.7	72.1
Inventory (AvgCst)	6.9	7.8	10.2
Other	5.6	7.6	8.4
Current Assets	90.1	90.0	134.7
Accts Payable	23.5	55.5	49.4
Debt Due	135.3	163.1	150.4
Other	58.6	44.7	55.8
Current Liab.	217.4	263.3	255.6
Fix. Chg. Cov.	364%	377%	360%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '03-'05 to '10-'12
Revenues	7.0%	8.0%	*6.5%*
"Cash Flow"	9.5%	9.5%	*7.5%*
Earnings	9.0%	8.5%	*7.5%*
Dividends	6.0%	6.5%	*9.5%*
Book Value	9.5%	11.0%	*7.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	99.8	106.5	120.3	115.4	442.0
2005	114.0	123.1	136.8	122.9	496.8
2006	118.0	131.7	147.0	136.8	533.5
2007	*130*	*150*	*160*	*140*	*580*
2008	*140*	*160*	*180*	*150*	*630*

Calendar	EARNINGS PER SHARE [A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2004	.13	.14	.20	.17	.64
2005	.15	.17	.22	.17	.71
2006	.13	.17	.21	.19	.70
2007	*.16*	*.22*	*.22*	*.20*	*.80*
2008	*.20*	*.24*	*.24*	*.22*	*.90*

Calendar	QUARTERLY DIVIDENDS PAID [B] ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2003	.084	.084	.084	.09	.34
2004	.09	.09	.09	.098	.37
2005	.098	.098	.098	.107	.40
2006	.107	.107	.115	.115	.44
2007	.115				

BUSINESS: Aqua America, Inc. is the holding company for water and wastewater utilities that serve approximately 2.8 million residents in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, and five other states. Divested three of four non-water businesses in '91; telemarketing group in '93; and others. Acquired AquaSource, 7/03; Consumers Water, 4/99; and others. Water supply revenues '06: residential, 60%; commercial, 14%; industrial & other, 26%. Officers and directors own 1.2% of the common stock (4/06 Proxy). Chairman & Chief Executive Officer: Nicholas DeBenedictis. Incorporated: Pennsylvania. Address: 762 West Lancaster Avenue, Bryn Mawr, Pennsylvania 19010. Telephone: 610-525-1400. Internet: www.aquaamerica.com.

Aqua America's results are starting to improve. After reporting weak profits for the first nine months of 2006, the company posted a 12% earnings advance in the final quarter of the year. Problems, such as higher production costs, increased short-term financing expense, poor weather, and delays in regulatory approvals, eased a bit during the quarter.

Increased rates should help lift results in the year ahead. Although one of the company's largest subsidiaries, Aqua Pennsylvania, received a substantial lift in rates in mid-2006, contributions from these adjustments should be more meaningful in 2007. In addition to the recent settlement of rate cases in Illinois and New Jersey, we expect Aqua America to receive further rate increases in 2007 and 2008.

The company will likely expand through acquisition. Aqua America completed about 28 acquisitions in 2006. The largest purchase, New York Water Services, which closed at the end of the year, helped expand the customer base considerably. More recently, the company agreed to buy Aquarian Water of Sea Cliff, Long Island. Although the acquisition strategy makes sense, it probably adds some risk. Acquired facilities can require expensive capital improvements to qualify for rate increases. Also, expenses, such as depreciation, can rise, before being fully offset by higher revenue.

We expect earnings to advance at about 6%-10% annually, on average, for the next few years. We are leaving our earnings estimate for 2007 unchanged, and are introducing an estimate of $0.90 per diluted share for 2008 at this time. The company should be able to improve efficiency at some of its recently purchased businesses. Results should also benefit from moderating chemical prices and energy utility costs.

These shares are ranked 4 (Below Average) for Timeliness. Further, our current projections indicate the issue offers little, if any, appreciation potential for the next 3 to 5 years. The dividend payout remains at about 63%, which is considerable. But the yield on this stock is not too attractive and thus offers limited downside price protection for investors.

Adam Rosner *April 27, 2007*

(A) Primary shares outstanding through '96; diluted thereafter. Excl. nonrec. gains (losses): '90, (38¢); '91, (34¢); '92, (38¢); '99, (11¢); '00, 2¢; '01, 2¢; '02, 5¢; '03, 4¢. Excl. gain from disc. operations: '96, 2¢. Next earnings report due early May. **(B)** Dividends historically paid in early March, June, Sept. & Dec. ■ Div'd. reinvestment plan available (5% discount). **(C)** In millions, adjusted for stock splits.

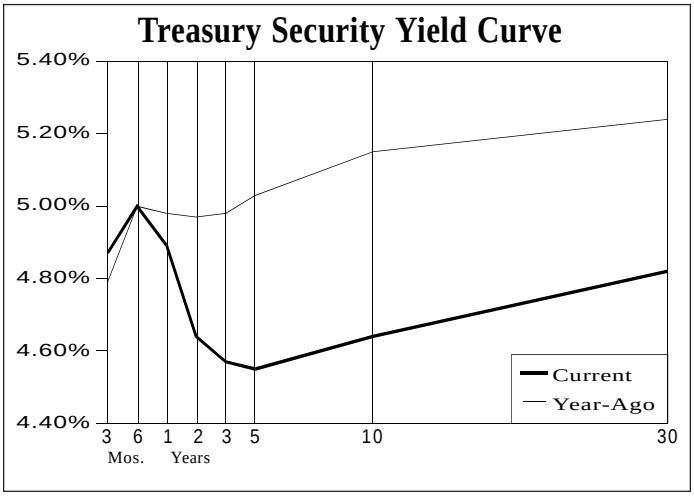
Company's Financial Strength	B+
Stock's Price Stability	85
Price Growth Persistence	90
Earnings Predictability	100

ATTACHMENT B

Selected Yields

	Recent (5/02/07)	3 Months Ago (1/31/07)	Year Ago (5/04/06)
TAXABLE			
Market Rates			
Discount Rate	6.25	6.25	5.75
Federal Funds	5.25	5.25	4.75
Prime Rate	8.25	8.25	7.75
30-day CP (A1/P1)	5.23	5.24	4.97
3-month LIBOR	5.36	5.36	5.16
Bank CDs			
6-month	3.13	3.30	3.04
1-year	3.73	3.86	3.86
5-year	3.91	3.91	4.02
U.S. Treasury Securities			
3-month	4.87	5.10	4.79
6-month	5.00	5.14	5.00
1-year	4.89	5.11	4.98
5-year	4.55	4.80	5.03
10-year	4.64	4.81	5.15
10-year (inflation-protected)	2.21	2.38	2.46
30-year	4.82	4.91	5.24
30-year Zero	4.79	4.86	4.97

	Recent (5/02/07)	3 Months Ago (1/31/07)	Year Ago (5/04/06)
Mortgage-Backed Securities			
GNMA 6.5%	5.58	5.79	5.97
FHLMC 6.5% (Gold)	5.72	5.91	6.16
FNMA 6.5%	5.67	5.84	6.11
FNMA ARM	5.49	5.63	4.81
Corporate Bonds			
Financial (10-year) A	5.61	5.63	6.09
Industrial (25/30-year) A	5.85	5.84	6.33
Utility (25/30-year) A	6.01	5.88	6.34
Utility (25/30-year) Baa/BBB	6.17	6.14	6.64
Foreign Bonds (10-Year)			
Canada	4.19	4.18	4.47
Germany	4.21	4.10	4.03
Japan	1.63	1.70	1.93
United Kingdom	5.10	4.98	4.70
Preferred Stocks			
Utility A	7.29	7.21	7.24
Financial A	6.33	6.33	6.24
Financial Adjustable A	5.50	5.50	N/A



	Recent (5/02/07)	3 Months Ago (1/31/07)	Year Ago (5/04/06)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	4.26	4.32	4.63
25-Bond Index (Revs)	4.45	4.59	5.24
General Obligation Bonds (GOs)			
1-year Aaa	3.60	3.61	3.60
1-year A	3.70	3.71	3.72
5-year Aaa	3.60	3.69	3.69
5-year A	3.71	3.88	3.97
10-year Aaa	3.80	3.86	4.17
10-year A	4.30	4.28	4.49
25/30-year Aaa	4.10	4.17	4.58
25/30-year A	4.40	4.50	4.84
Revenue Bonds (Revs) (25/30-Year)			
Education AA	4.50	4.60	4.63
Electric AA	4.50	4.57	4.59
Housing AA	4.61	4.66	4.69
Hospital AA	4.64	4.68	4.90
Toll Road Aaa	4.50	4.58	4.75

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	4/25/07	4/11/07	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1347	1807	-460	1536	1611	1656
Borrowed Reserves	83	80	3	84	131	207
Net Free/Borrowed Reserves	1264	1727	-463	1452	1480	1449

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Growth Rates Over the Last...		
	4/16/07	4/9/07	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	1363.5	1401.0	-37.5	-4.1%	0.1%	-0.9%
M2 (M1+savings+small time deposits)	7212.1	7226.2	-14.1	7.6%	8.0%	6.3%

ATTACHMENT C

Jon Markman

To print article, click **Print** on your browser's **File** menu.

Go back

Posted 1/12/2005

SuperModels Community

Join the discussion in the MSN Money SuperModels Community.

SuperModels

Invest in the coming global water shortage

Fresh water's getting scarce, and it has no substitutes. For investors in companies that can supply our increasingly thirsty planet, that spells opportunity.

By Jon D. Markman

Ten years ago next Monday, a massive earthquake rolled under the Japanese city of Kobe at dawn, toppling 140,000 buildings, causing 300 major fires, killing more than 5,000 people and leaving 300,000 homeless.

To help cover the story for the L.A. Times, I left my wife to care for our 10-day-old daughter and 2-year-old son and flew into the city with a small team of Los Angeles-based trauma doctors and nurses. We found a surreal, smoking ruin of a city with roads twisted like coils of rope, high-rises tilted at Dr. Seuss angles and thousands of middle-class families jammed into dingy, ice-cold rooms in the few public buildings left standing.

Just as in the tsunami zone of South Asia this month, the immediate health danger, besides a possible outbreak of disease, was a lack of fresh water. More than 75% of the city's water supply was destroyed when underground pipes fractured. As much as they desired pallets of drugs, food, blankets and tents sent from throughout Japan and abroad, the Kobe survivors coveted -- and needed -- clean, bottled water for cooking, drinking and bathing.

Both incidents are a stark reminder that water is our most precious resource. Because it is seemingly ubiquitous in the United States, it is taken for granted. Massive snowstorms in California this month have loaded up the snowpack that provides water there, and rains in the Southeast are filling reservoirs in that part of the country.

The rest of the world, however, is not so fortunate.

Not making any more water

There is no more fresh water on Earth today than there was a million years ago. Yet today, 6 billion people share it. Since 1950, the world population has doubled, but water use has tripled, notes John Dickerson, an analyst and fund manager based in San Diego. Unlike petroleum, he adds, no technological innovation can ever replace water.

China, which is undergoing a vast rural-to-urban population migration, is emblematic of the places where water has become scarce. It has about as much

Cool Tools

Get market news by e-mail

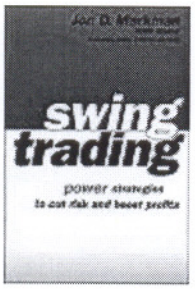
See if refinancing works

Personal finance bookshelf

Letters from MSN Money readers

Find It!
Article Index
Fast Answers
Tools Index
Site map

msn Money



Purchase Jon Markman's book "Swing Trading" at MSN Shopping.

water as Canada but 100 times more people. Per-capita water reserves are only about a fourth the global average, according to experts. Of its 669 cities, 440 regularly suffer moderate to critical water shortages.

Although not widely appreciated, water has been recognized by conservative investors as an investment opportunity -- and it has rewarded them. Over the past 10 years, the Media General water utilities index is up 133%, double the return of the **Dow Jones Utilities Index** ($UTIL). Over the past five years, water utilities are up 32% -- clobbering the flat returns of both the Dow Jones Utilities and the **Dow Industrials** ($INDU). One of water's key long-term value drivers as an investment, according to Dickerson: Demand is not affected by inflation, recession, interest rates or changing tastes.

Related Articles

Wring profits from the coming water shortage

SuperModels

Recent articles:
• StockScouter likes energy and more in '05, 1/5/2005
• My 12 big surprises for 2005 , 12/29/2004
• Hey, Modelman! Tune in to Sirius, 12/22/2004
More...

Virtually all of the U.S. water utility stocks are regulated by states and counties, which makes them pretty dull. Governmental entities typically give utilities a monopoly in a geographic region, then set their profit margin a smidge above costs. Just about the only distinguishing factor among them are the growth rates of their regions and their ability to efficiently manage their underground pipe and pumping infrastructure. Among the best are **Aqua America** (WTR, news, msgs) of Philadelphia, **Southwest Water** (SWWC, news, msgs) of Los Angeles; **California Water Service Group** (CWT, news, msgs), based in San Jose, Calif.; and **American States Water** (AWR, news, msgs) of San Dimas, Calif.

In a moment, I'll offer a couple of potentially more impactful ways to invest in water, but first let's look a little more broadly at world demand.

Aquifers in India are being sucked dry

The tsunami has focused attention on water demand in South Asia -- and it's a good thing, as it was already reaching critical status in rural areas. Several decades ago, farmers in the Indian state of Gujarat used oxen to haul water in buckets from a few feet below the surface. Now they pump it from 1,000 feet below the surface. That may sound good, but they have been drawing water from the earth to feed a mushrooming population at such a terrific rate that ancient aquifers have been sucked dry -- turning once-fertile fields slowly into sand.

According to New Scientist magazine, farmers using crude oilfield technology in India have drilled 21 million "tube wells" into the strata beneath the fields, and every year millions more wells throughout the region -- all the way to Vietnam -- are being dug to service water-needy crops like rice and sugar cane. The magazine quoted research from the annual Stockholm Water Symposium that the pumps that transformed Indian farming are drawing 200 cubic kilometers of water to the surface each year, while only a fraction is replaced by monsoon

rains. At this rate, the research suggested, groundwater supplies in some areas will be exhausted in five to 10 years, and millions of Indians will see their farmland turned to desert.

In China, the magazine reported, 30 cubic kilometers more water is being pumped to the surface each year than is replaced by rain -- one of the reasons that the country has become dependent on grain imports from the West. This is not just an issue for agriculture. Earlier this year, the Indian state of Kerala ordered the **PepsiCo** (PEP, news, msgs) and **Coca-Cola** (KO, news, msgs) bottling plants closed due to water shortages, costing the companies millions of dollars.

In this country, shareholder activists already are lobbying companies to share water-dependency concerns worldwide with their stakeholders in their financial statements.

Water, water everywhere, but . . .

The central problem is that less than 2% of the world's ample store of water is fresh. And that amount is bombarded by industrial pollution, disease and cyclical shifts in rain patterns. Its increasing scarcity has impelled private companies and countries to attempt to lock up rights to key sources. In an article last month, the Christian Science Monitor suggested that the next decade may see a cartel of water-exporting countries rivaling the Organization of Petroleum Exporting Countries for dominance in the world economy.

"Water is blue gold; it's terribly precious," Maude Barlow, chair of the Council of Canadians, told the Monitor. "Not too far in the future, we're going to see a move to surround and commodify the world's fresh water. Just as they've divvied up the world's oil, in the coming century, there's going to be a grab."

Besides the domestic water utilities listed above -- and similarly plodding foreign utilities such as **United Utilities** (UU, news, msgs) of the United Kingdom, which sports a 6.9% dividend yield, and **Suez** (SZE, news, msgs) of France -- investors interested in the sector can consider a number of variant plays. None are extremely exciting, but my guess is that, over the next few years, some more interesting purification technologies will emerge, along with, perhaps, a vibrant attempt at worldwide industry consolidation.

One current idea is Tennessee-based copper pipe and valve maker **Mueller Industries** (MLI, news, msgs), a $1 billion business with a trailing price/earnings multiple of 15 that is still not expensive despite a 47% run-up in the past year. Its leading outside investor is **Berkshire Hathaway** (BRK.A, news, msgs), the

investment vehicle of legendary investor Warren Buffett.

Another is flow-control products maker **Watts Water Technologies** (WTS, news, msgs), which is a little richer at a $975 million market cap and a trailing P/E multiple of 19, but is still owned by several leading value managers, including Mario Gabelli.

And possibly the most interesting is **Consolidated Water** (CWCO, news, msgs), a $160 million company based in the Cayman Islands that specializes in developing and operating ocean-water desalinization plants and water-distribution systems in areas where natural supplies of drinking water are scarce, such as the Caribbean and South America. It currently supplies water to Belize, Barbados, the British Virgin Islands and the Bahamas, and it has expansion plans. It is the most expensive, but it may also have the greatest growth prospects. Of all of these, it is up the most over the past five years, a relatively steady 355%.

Of course, there is one other benefit to water investing: When these companies say they're going to do a dilutive deal, it's not something to worry about.

Fine Print

Dickerson runs a hedge fund in San Diego strictly focused on water investing, the Summit Water Equity Fund. . . To learn more about Southwest Water, click here. . . . To learn more about California Water Service Group, which runs systems in New Mexico, Hawaii and Washington State, as well as California, click here. . . . To learn more about American States Water, click here. . . To learn more about Mueller, click here, and, for Consolidated Water, click here. . . . Seems like talk is cheap. Since mid-December, the value of the company radio personality Howard Stern is leaving, **Viacom** (VIA.B, news, msgs), has risen 9% while the value of the company he's headed to, **Sirius Satellite Radio** (SIRI, news, msgs), is down 13.5%. . . . For background on the Kobe earthquake, approaching its 10th anniversary, click here and here.

Jon D. Markman is publisher of StockTactics Advisor, an independent weekly investment newsletter, as well as senior strategist and portfolio manager at Pinnacle Investment Advisors. While he cannot provide personalized investment advice or recommendations, he welcomes column critiques and comments at jon.markman@gmail.com; put COMMENT in the subject line. At the time of publication he held positions in the following stocks mentioned in this column: Coca-Cola.

Editors' choice

- 8 offbeat ways to pay for college
- How to build your first budget
- It pays to avoid a speeding ticket -- or fight one
- Is your boss spying on you?
- Make your next raise really pay off

Readers' choice

Ratings	Top 5 Articles
9.37	Zombie debt collectors dig up your old mistakes
9.35	10 ways to avoid outrageous hospital overcharges
9.35	10 ways to stop identity theft cold
9.33	What if you can't pay the IRS?
9.32	'Phishing' scams: How to avoid getting hooked

View all top rated articles

More Resources

- **E-mail us** your comments on this article
- Post on the SuperModels **message board**
- Get a daily dose of **market news**
- Sign up to receive an **alert** when we publish Jon's next article

Search MSN Money tips

water Go

by Microsoft of any specific security or trading strategy. An investor's best course of action must be based on individual circumstances.

ATTACHMENT D

Cost-of-Service Rates Manual

Federal Energy Regulatory Commission
888 North Capitol Street, N.E.
Washington, D.C. 20426
United States of America
www.ferc.gov

June 1999

Table of Contents

Introduction 1

Step 1: Computing the Cost-of-Service 6
The Cost-of-Service Formula 6
Test Period 7
Rate Base 8
Gross Plant 9
Allowance For Funds Used During Construction (AFUDC) 9
Accumulated Reserve for Depreciation 10
Management Fee 10
Accumulated Deferred Income Taxes (ADIT) 11
Working Capital 12
Cash working capital 12
Materials and Supplies, and Prepayments 13
Cost-of-Service 13
Return 13
Capitalization or Capital Structure 15
Cost of Debt 16
Return on Equity 16
Pretax Return 17
Operation and Maintenance Expenses 18
Administrative and General Expenses 19
Depreciation Expense 19
Federal and State Income Taxes 20
AFUDC 21
Effective Tax Rate 22
Limited Liability Companies 22
Non-Income Taxes 22
Credits to the Cost-of-Service 23

Step 2: Computing a Functionalized Cost-of-Service 23
K-N Method 24

Step 3: Cost Classification 28
Classification of Costs Between Fixed and Variable 28
Classification of Costs Between Demand and Commodity 29
Volumetric 30
Fixed-Variable 30
Seaboard 30
United 31
Modified Fixed-Variable 32
Straight Fixed-Variable 32

Step 4: Cost Allocation 33
Mcf's and Dth's 34

$159,602,000, is equity financed. This means that the owners of Pipeline U.S.A. used their own funds to finance this portion of their investment.

** Pipeline U.S.A. issues its own debt which is not guaranteed by its parent, has its own bond rating and its capital structure is comparable to other equity capitalizations approved by the Commission. Therefore, Pipeline U.S.A. meets the Commission's criteria for using its own capital structure for setting its rates.*

Cost of Debt: This refers to the cost of long term debt incurred by the pipeline to construct or expand the pipeline. For ongoing pipelines that have been issuing debt, we use the actual imbedded cost of debt in the capital structure. The actual imbedded cost of debt is the weighted average of all the debt issued and the cost at which the debt was issued. For new pipelines that have indicated that they would issue debt to finance their investment, but have not yet actually issued the debt, we compute the cost of debt based on a projection, or recent historical debt cost such as historical average Baa utility bonds (Moody's Bond Survey), which is the most prevalent rating for utilities. We also use Moody's to compute the cost of debt if we decide use of a hypothetical capital structure is appropriate.

A-8, column 3, shows the cost of debt of Pipeline U.S.A. of 8.25%. The cost of debt represents a return to Pipeline U.S.A.'s bondholders. The debt return dollars appearing in Column 5 represents the cost to Pipeline U.S.A. to pay the interest on the debt to its bondholders. This debt return, or interest on debt, of $30,723,000 as shown in column (5) is included in the Return component of the cost-of-service.

Return on Equity or Cost of Equity: This is the pipeline's actual profit, or return on its investment. The return on equity is derived from a range of equity returns developed using a Discounted Cash Flow

(DCF) analysis of a proxy group of publicly held natural gas companies. The Commission currently uses a two-stage Discounted Cash Flow (DCF) methodology. The two-stage method projects different rates of growth in projected dividend cash flows for each of the two stages, one stage reflecting short term growth estimates and the other long term growth estimates. These estimates are then weighted, two-thirds for the short-term growth projection and one-third on the long-term growth, and utilized in determining a range of reasonable equity returns. Two-thirds is used for the short-term growth rate on the theory that short-term growth rates are more predictable, and thus deserve a higher weighting than long term growth rate projections. An equity return is then selected within this zone based on an analysis of the company's risk. It is assumed, that most pipelines face risks that would place them in the middle of the zone of reasonableness. However, a case could be made depending on the facts of the specific pipeline that the return on equity should be outside the zone. As an example, a pipeline with a high debt capitalization ratio is usually considered more risky and thus, a higher return on equity would be expected.

We have determined that a reasonable return on equity for Pipeline U.S.A. is 14.00%. This return was at the high end of our range of equity returns because Pipeline U.S.A. is a relatively new pipeline company with a high debt capitalization ratio. The equity portion of the return permitted to be collected in rates is $22,344,000 shown in column (5) of A-8.

Pretax Return. Pretax return is the amount earned by a pipeline before income taxes and debt interest payments. Pretax return is often calculated for pipelines and used to further settlement negotiations. Using a pretax return figure can avoid the lengthy discussions and debates that surround the issues of capitalization ratios and ROE calculations and analyses. Use of a pretax return reduces these issues down to one number, a pretax percentage that can easily be compared to other pipeline's pretax returns. The pretax return figure

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
DOCKET NO. WS-01303A-06-0403
TABLE OF CONTENTS TO SURREBUTTAL SCHEDULES WAR

SCHEDULE #	
WAR - 1	COST OF CAPITAL SUMMARY
WAR - 2	DCF COST OF EQUITY CAPITAL
WAR - 3	DIVIDEND YIELD CALCULATION
WAR - 4	DIVIDEND GROWTH RATE CALCULATION
WAR - 5	DIVIDEND GROWTH COMPONENTS
WAR - 6	GROWTH RATE COMPARISON
WAR - 7	CAPM COST OF EQUITY CAPITAL
WAR - 8	ECONOMIC INDICATORS - 1990 TO PRESENT
WAR - 9	CAPITAL STRUCTURES OF SAMPLE COMPANIES

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
COST OF CAPITAL SUMMARY

DOCKET NO. WS-01303A-06-0403
SURREBUTTAL SCHEDULE WAR - 1

WEIGHTED COST OF CAPITAL - ANTHEM WATER

LINE NO.	DESCRIPTION	(A) CAPITALIZATION PER COMPANY	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED CAPITALIZATION	(D) CAPITAL RATIO	(E) COST	(F) WEIGHTED COST
1	DEBT	$ 25,860,370	$ -	$ 25,860,370	60.00%	5.37%	3.22%
2	PREFERRED STOCK	-	-	-	0.00%	0.00%	0.00%
3	COMMON EQUITY	17,240,246	-	17,240,246	40.00%	10.01%	4.00%
4	TOTAL CAPITALIZATION	$ 43,100,616	$ -	$ 43,100,616	100.00%		
5	**WEIGHTED COST OF CAPITAL**						7.22%

WEIGHTED COST OF CAPITAL - ANTHEM/AGUA FRIA WASTEWATER

LINE NO.	DESCRIPTION	(A) CAPITALIZATION PER COMPANY	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED CAPITALIZATION	(D) CAPITAL RATIO	(E) COST	(F) WEIGHTED COST
1	DEBT	$ 14,781,695	$ -	$ 14,781,695	60.00%	5.37%	3.22%
2	PREFERRED STOCK	-	-	-	0.00%	0.00%	0.00%
3	COMMON EQUITY	9,854,463	-	9,854,463	40.00%	10.01%	4.00%
4	TOTAL CAPITALIZATION	$ 24,636,158	$ -	$ 24,636,158	100.00%		
5	**WEIGHTED COST OF CAPITAL**						7.22%

REFERENCES:
COLUMN (A): COMPANY SCHEDULE D-1
COLUMN (B): TESTIMONY, WAR
COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMN (D): COLUMN (C) ÷ COLUMN (C), LINE 4
COLUMN (E): LINE 1 - SCHEDULE WAR-1, PAGE 2; LINE 3 - TESTIMONY, WAR
COLUMN (F): COLUMN (D) x COLUMN (E)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
COST OF CAPITAL SUMMARY

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 1

WEIGHTED COST OF DEBT

LINE NO.	(A) DESCRIPTION	(B) BALANCE	(C) ANNUAL INTEREST	(D) INTEREST RATE	(E) BALANCE RATIOS	(F) WEIGHTED COST OF DEBT
1	AUG '08 L-T SENIOR NOTES	$ 4,500,000	$ 320,490	7.122%	2.26%	0.161%
2	SEP '30 L-T PROMISSORY NOTE	25,000,000	1,230,000	4.920%	12.54%	0.617%
3	SEP '28 L-T NOTE - MARICOPA	10,635,000	264,427	2.486%	5.34%	0.133%
4	SEP '13 PILR - MONTEREY	51,711	3,237	6.260%	0.03%	0.002%
5	AUG '15 PILR - ROSALEE	51,822	3,721	7.180%	0.03%	0.002%
6	AUG '15 PILR - T.O. DEVELOPMENT	43,703	3,137	7.178%	0.02%	0.002%
7	SEP '13 PILR - MONTEX/LINCOLN	27,840	1,604	5.760%	0.01%	0.001%
8	DEC '13 L-T PROMISSORY NOTE	24,700,000	1,331,330	5.390%	12.39%	0.668%
9	DEC '16 L-T PROMISSORY NOTE	11,200,000	618,240	5.520%	5.62%	0.310%
10	DEC '18 L-T PROMMISSORY NOTE	123,100,000	6,918,220	5.620%	61.76%	3.471%
11						
12	TOTALS	$ 199,310,076	$ 10,694,405		100.00%	
13						
14	**WEIGHTED COST OF DEBT**					5.37%

REFERENCES:
COLUMN (A) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2
COLUMN (B) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2
COLUMN (C) LINES 1 THRU 7: COMPANY SCHEDULE D-1, PAGE 2
COLUMN (A) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007
COLUMN (B) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007
COLUMN (C) LINES 8 THRU 10: COLUMN (B) x COLUMN (D)
COLUMN (D) LINES 1 THRU 7: COLUMN (C) ÷ COLUMN (D)
COLUMN (D) LINES 8 THRU 10: DECISION NO. 68994 COMPLIANCE REPORT FILED ON JANUARY 8, 2007
COLUMN (E): COLUMN (A) LINES 1 THRU 10 ÷ LINE 12
COLUMN (F): COLUMN (D) x COLUMN (E)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
COST OF CAPITAL SUMMARY

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 1

COST OF COMMON EQUITY CALCULATION

LINE NO.			
1	**DCF METHODOLOGY**		
2	DCF - WATER COMPANY SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	7.93%	SCHEDULE WAR-2, COLUMN (C), LINE 5
3	DCF - NATURAL GAS LDC SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	9.07%	SCHEDULE WAR-2, COLUMN (C), LINE 13
4	AVERAGE OF DCF ESTIMATES	8.50%	(LINE 2 + LINE 3) ÷ 2
5	**CAPM METHODOLOGY**		
6	CAPM - WATER COMPANY GEOMETRIC MEAN ESTIMATE	9.72%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 5
7	CAPM - NATURAL GAS LDC GEOMETRIC MEAN ESTIMATE	9.67%	SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 13
8	CAPM - WATER COMPANY ARITHMETIC MEAN ESTIMATE	11.38%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 5
9	CAPM - NATURAL GAS LDC ARITHMETIC MEAN ESTIMATE	11.31%	SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 13
10	AVERAGE OF CAPM ESTIMATES	10.52%	(SUM OF LINES 6 THRU) ÷ 4
11	**AVERAGE OF DCF AND CAPM ESTIMATES**	9.51%	(LINE 4 + LINE 10) ÷ 2
12	**ADD: 50 BASIS POINT ADJUSTMENT FOR DEBT LEVERAGE**	0.50%	TESTIMONY WAR
13	**COST OF COMMON EQUITY ESTIMATE**	10.01%	LINE 11 + LINE 12

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DCF COST OF EQUITY CAPITAL

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 2

LINE NO.	STOCK SYMBOL	COMPANY	(A) DIVIDEND YIELD	+	(B) GROWTH RATE (g)	=	(C) DCF COST OF EQUITY CAPITAL
1	AWR	AMERICAN STATES WATER CO.	2.52%	+	6.74%	=	9.26%
2	CWT	CALIFORNIA WATER SERVICE GROUP	2.97%	+	5.30%	=	8.27%
3	SWWC	SOUTHWEST WATER COMPANY	1.67%	+	5.12%	=	6.79%
4	WTR	AQUA AMERICA, INC.	2.04%	+	5.35%	=	7.39%
5	**WATER COMPANY AVERAGE**						7.93%
6	ATG	AGL RESOURCES, INC.	3.83%	+	6.01%	=	9.84%
7	ATO	ATMOS ENERGY CORP.	4.01%	+	5.55%	=	9.56%
8	LG	LACLEDE GROUP, INC.	4.67%	+	3.70%	=	8.37%
9	NJR	NEW JERSEY RESOURCES CORPORATION	2.98%	+	6.20%	=	9.18%
10	GAS	NICOR, INC.	3.71%	+	3.72%	=	7.43%
11	NWN	NORTHWEST NATURAL GAS CO.	3.03%	+	5.15%	=	8.18%
12	PNY	PIEDMONT NATURAL GAS COMPANY	3.58%	+	3.71%	=	7.30%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	2.52%	+	11.29%	=	13.81%
14	SWX	SOUTHWEST GAS CORPORATION	2.22%	+	7.25%	=	9.47%
15	WGL	WGL HOLDINGS, INC.	4.18%	+	3.34%	=	7.52%
16	**NATURAL GAS LDC AVERAGE**						9.07%

REFERENCES:
COLUMN (A): SCHEDULE WAR - 3, COLUMN C
COLUMN (B): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND YIELD CALCULATION

DOCKET NO. WS-01303A-06-0403
SCHEDULE WAR - 3

LINE NO.	STOCK SYMBOL	COMPANY	(A) ESTIMATED DIVIDEND (PER SHARE)	÷	(B) AVERAGE STOCK PRICE (PER SHARE)	=	(C) DIVIDEND YIELD
1	AWR	AMERICAN STATES WATER CO.	$0.94	÷	$37.32	=	2.52%
2	CWT	CALIFORNIA WATER SERVICE GROUP	1.16	÷	39.08	=	2.97%
3	SWWC	SOUTHWEST WATER COMPANY	0.23	÷	13.91	=	1.67%
4	WTR	AQUA AMERICA, INC.	0.46	÷	22.59	=	2.04%
5	**WATER COMPANY AVERAGE**						2.30%
6	ATG	AGL RESOURCES, INC.	$1.64	÷	$42.81	=	3.83%
7	ATO	ATMOS ENERGY CORP.	1.28	÷	31.89		4.01%
8	LG	LACLEDE GROUP, INC.	1.46	÷	31.25	=	4.67%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.52	÷	51.08		2.98%
10	GAS	NICOR, INC.	1.86	÷	50.15		3.71%
11	NWN	NORTHWEST NATURAL GAS CO.	1.42	÷	46.81	=	3.03%
12	PNY	PIEDMONT NATURAL GAS COMPANY	0.96	÷	26.78	=	3.58%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	0.96	÷	38.02	=	2.52%
14	SWX	SOUTHWEST GAS CORPORATION	0.86	÷	38.70	=	2.22%
15	WGL	WGL HOLDINGS, INC.	1.36	÷	32.56	=	4.18%
16	**NATURAL GAS LDC AVERAGE**						3.47%

REFERENCES:
COLUMN (A): ESTIMATED 12 MONTH DIVIDEND REPORTED IN VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 04/27/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's).
COLUMN (B): EIGHT WEEK AVERAGE OF CLOSING PRICES FROM 03/12/2007 TO 05/04/2007
STOCK QUOTES OBTAINED THROUGH BIG CHARTS WEB SITE - HISTORICAL QUOTES (www.bigcharts.com).
COLUMN (C): COLUMN (A) ÷ COLUMN (B)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH RATE CALCULATION

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 4

LINE NO.	STOCK SYMBOL	COMPANY	(A) INTERNAL GROWTH (br)	+	(B) EXTERNAL GROWTH (sv)	=	(C) DIVIDEND GROWTH (g)
1	AWR	AMERICAN STATES WATER CO.	4.00%	+	2.74%	=	6.74%
2	CWT	CALIFORNIA WATER SERVICE GROUP	4.25%	+	1.05%	=	5.30%
3	SWWC	SOUTHWEST WATER COMPANY	3.25%	+	1.87%	=	5.12%
4	WTR	AQUA AMERICA, INC.	4.00%	+	1.35%	=	5.35%
5	**WATER COMPANY AVERAGE**						5.63%
6	ATG	AGL RESOURCES, INC.	5.75%	+	0.26%	=	6.01%
7	ATO	ATMOS ENERGY CORP.	4.50%	+	1.05%	=	5.55%
8	LG	LACLEDE GROUP, INC.	3.00%	+	0.70%	=	3.70%
9	NJR	NEW JERSEY RESOURCES CORPORATION	5.50%	+	0.70%	=	6.20%
10	GAS	NICOR, INC.	3.65%	+	0.07%	=	3.72%
11	NWN	NORTHWEST NATURAL GAS CO.	4.75%	+	0.40%	=	5.15%
12	PNY	PIEDMONT NATURAL GAS COMPANY	3.25%	+	0.46%	=	3.71%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	10.50%	+	0.79%	=	11.29%
14	SWX	SOUTHWEST GAS CORPORATION	6.25%	+	1.00%	=	7.25%
15	WGL	WGL HOLDINGS, INC.	3.25%	+	0.09%	=	3.34%
16	**NATURAL GAS LDC AVERAGE**						5.59%

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH RATE CALCULATION

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 4

LINE NO.	STOCK SYMBOL	COMPANY	(A) SHARE GROWTH		(B) { [((M ÷ B) + 1) ÷ 2] - 1 }		(C) EXTERNAL GROWTH (sv)
1	AWR	AMERICAN STATES WATER CO.	5.00%	x	{ [((2.10) + 1) ÷ 2] - 1 }	=	2.74%
2	CWT	CALIFORNIA WATER SERVICE GROUP	2.00%	x	{ [((2.05) + 1) ÷ 2] - 1 }	=	1.05%
3	SWWC	SOUTHWEST WATER COMPANY	4.50%	x	{ [((1.83) + 1) ÷ 2] - 1 }	=	1.87%
4	WTR	AQUA AMERICA, INC.	1.25%	x	{ [((3.16) + 1) ÷ 2] - 1 }	=	1.35%
5	**WATER COMPANY AVERAGE**						1.75%
6	ATG	AGL RESOURCES, INC.	0.50%	x	{ [((2.04) + 1) ÷ 2] - 1 }	=	0.26%
7	ATO	ATMOS ENERGY CORP.	5.00%	x	{ [((1.42) + 1) ÷ 2] - 1 }	=	1.05%
8	LG	LACLEDE GROUP, INC.	2.75%	x	{ [((1.51) + 1) ÷ 2] - 1 }	=	0.70%
9	NJR	NEW JERSEY RESOURCES CORPORATION	1.25%	x	{ [((2.12) + 1) ÷ 2] - 1 }	=	0.70%
10	GAS	NICOR, INC.	0.10%	x	{ [((2.45) + 1) ÷ 2] - 1 }	=	0.07%
11	NWN	NORTHWEST NATURAL GAS CO.	0.75%	x	{ [((2.06) + 1) ÷ 2] - 1 }	=	0.40%
12	PNY	PIEDMONT NATURAL GAS COMPANY	0.75%	x	{ [((2.23) + 1) ÷ 2] - 1 }	=	0.46%
13	SJI	SOUTH JERSEY INDUSTIES, INC.	1.15%	x	{ [((2.37) + 1) ÷ 2] - 1 }	=	0.79%
14	SWX	SOUTHWEST GAS CORPORATION	2.65%	x	{ [((1.75) + 1) ÷ 2] - 1 }	=	1.00%
15	WGL	WGL HOLDINGS, INC.	0.25%	x	{ [((1.72) + 1) ÷ 2] - 1 }	=	0.09%
16	**NATURAL GAS LDC AVERAGE**						0.55%

REFERENCES:
COLUMN (A): TESTIMONY, WAR
COLUMN (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 04/27/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)
COLUMN (C): COLUMN (A) x COLUMN (B)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH COMPONENTS

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 5

LINE NO.	STOCK SYMBOL	WATER COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	AWR	AMERICAN STATES WATER CO.	2002	0.3507		9.50%		3.33%	14.05	15.18	
2			2003	-0.1282		5.60%		NMF	13.97	15.21	
3			2004	0.1524		6.60%		1.01%	15.01	16.75	
4			2005	0.3182		8.50%		2.70%	15.72	16.80	
5			2006	0.3158		8.10%		2.56%	16.64	17.05	
6			GROWTH 2002 - 2006					2.40%	4.50%		2.95%
7			2007	0.3935		8.50%		3.35%		18.00	5.57%
8			2008	0.4121		9.00%		3.71%		19.00	5.56%
9			2010-12	0.4829		9.00%		4.35%	6.00%	22.00	5.23%
10											
11	CWT	CALIFORNIA WATER SERVICE GROUP	2002	0.1040		9.50%		0.99%	13.12	15.18	
12			2003	0.0744		7.90%		0.59%	14.44	16.93	
13			2004	0.2260		9.00%		2.03%	15.66	18.37	
14			2005	0.2245		9.30%		2.09%	15.79	18.39	
15			2006	0.1418		6.80%		0.96%	18.31	20.66	
16			GROWTH 2002 - 2006					1.33%	3.00%		8.01%
17			2007	0.2750		8.50%		2.34%		21.00	1.65%
18			2008	0.3314		9.50%		3.15%		21.50	2.01%
19			2010-12	0.4419		10.00%		4.42%	5.00%	23.00	2.17%
20											
21	SWWC	SOUTHWEST WATER COMPANY	2002	0.6154		9.70%		5.97%	4.27	14.35	
22			2003	0.6364		9.00%		5.73%	4.90	16.17	
23			2004	0.2174		3.60%		0.78%	6.17	20.36	
24			2005	0.4118		5.00%		2.06%	6.49	22.33	
25			2006	0.4750		5.60%		2.66%	6.98	23.80	
26			GROWTH 2002 - 2006					3.44%	14.00%		13.48%
27			2007	0.4667		6.00%		2.80%		25.00	5.04%
28			2008	0.4800		6.00%		2.88%		26.00	4.52%
29			2010-12	0.5143		7.00%		3.60%	8.50%	30.00	4.74%
30											
31	WTR	AQUA AMERICA, INC.	2002	0.4074		12.70%		5.17%	4.36	113.19	
32			2003	0.3860		10.20%		3.94%	5.34	123.45	
33			2004	0.4219		10.70%		4.51%	5.89	127.18	
34			2005	0.4366		11.20%		4.89%	6.30	128.97	
35			2006	0.3714		10.00%		3.71%	6.96	132.33	
36			GROWTH 2002 - 2006					4.45%	11.00%		3.98%
37			2007	0.4000		11.00%		4.40%		134.00	1.26%
38			2008	0.3889		11.50%		4.47%		136.00	1.38%
39			2010-12	0.3333		11.50%		3.83%	7.00%	140.00	1.13%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 04/27/2007
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2002 - 2006

COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH COMPONENTS

LINE NO.	STOCK SYMBOL	NATURAL GAS LDC NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	ATG	AGL RESOURCES, INC.	2002	0.4066		14.50%		5.90%	12.52	56.70	
2			2003	0.4663		14.00%		6.53%	14.66	64.50	
3			2004	0.4956		11.00%		5.45%	18.06	76.70	
4			2005	0.4758		12.90%		6.14%	19.29	77.70	
5			2006	0.4559		13.00%		5.93%	20.69	77.75	
6			GROWTH 2002 - 2006					5.99%	8.50%		8.21%
7			2007	0.4143		13.50%		5.59%		78.00	0.32%
8			2008	0.4345		14.00%		6.08%		79.00	0.80%
9			2010-12	0.4194		14.00%		5.87%	2.50%	80.00	0.57%
10											
11	ATO	ATMOS ENERGY CORP.	2002	0.1862		10.40%		1.94%	13.75	41.68	
12			2003	0.2982		9.30%		2.77%	16.66	51.48	
13			2004	0.2278		7.60%		1.73%	18.05	62.80	
14			2005	0.2791		8.50%		2.37%	19.90	80.54	
15			2006	0.3700		9.90%		3.66%	20.16	81.74	
16			GROWTH 2002 - 2006					2.50%	8.50%		18.34%
17			2007	0.3600		9.00%		3.24%		89.50	9.49%
18			2008	0.3810		9.50%		3.62%		92.50	6.38%
19			2010-12	0.4600		10.00%		4.60%	4.00%	107.00	5.53%
20											
21	LG	LACLEDE GROUP, INC.	2002	-0.1356		7.80%		NMF	15.07	18.96	
22			2003	0.2637		11.60%		3.06%	15.65	19.11	
23			2004	0.2582		10.10%		2.61%	16.96	20.98	
24			2005	0.2789		10.90%		3.04%	17.31	21.17	
25			2006	0.4093		12.50%		5.12%	18.85	21.36	
26			GROWTH 2002 - 2006					3.46%	3.50%		3.02%
27			2007	0.2368		9.00%		2.13%		21.50	0.66%
28			2008	0.2550		9.50%		2.42%		22.00	1.49%
29			2010-12	0.3191		10.00%		3.19%	5.00%	25.00	3.20%
30											
31	NJR	NEW JERSEY RESOURCES CORPORATION	2002	0.4258		15.70%		6.69%	13.06	27.67	
32			2003	0.4790		15.60%		7.47%	15.38	27.23	
33			2004	0.4902		15.30%		7.50%	16.87	27.74	
34			2005	0.4868		17.00%		8.28%	15.90	27.55	
35			2006	0.4857		12.60%		6.12%	22.50	27.63	
36			GROWTH 2002 - 2006					7.21%	8.50%		-0.04%
37			2007	0.4759		12.50%		5.95%		28.00	1.34%
38			2008	0.4800		12.00%		5.76%		28.50	1.56%
39			2010-12	0.4667		11.00%		5.13%	8.00%	29.50	1.32%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 03/16/2007
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2002 - 2006
COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH COMPONENTS

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 5

LINE NO.	STOCK SYMBOL	NATURAL GAS LDC NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	x	(B) RETURN ON BOOK EQUITY (r)	=	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE ($/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	GAS	NICOR, INC.	2002	0.3611		17.50%		6.32%	16.55	44.01	
2			2003	0.1185		12.30%		1.46%	17.13	44.04	
3			2004	0.1622		13.10%		2.12%	16.99	44.10	
4			2005	0.1878		12.50%		2.35%	18.36	44.18	
5			2006	0.3861		14.00%		5.41%	19.35	44.70	
6			GROWTH 2002 - 2006					3.53%	1.50%		0.39%
7			2007	0.2963		13.00%		3.85%		44.60	-0.22%
8			2008	0.3091		13.00%		4.02%		44.70	0.00%
9			2010-12	0.3103		12.00%		3.72%	4.50%	45.00	0.13%
10											
11	NWN	NORTHWEST NATURAL GAS CO.	2002	0.2222		8.50%		1.89%	18.88	25.59	
12			2003	0.2784		9.00%		2.51%	19.52	25.94	
13			2004	0.3011		8.90%		2.68%	20.64	27.55	
14			2005	0.3744		9.90%		3.71%	21.28	27.58	
15			2006	0.3930		10.60%		4.17%	21.96	27.28	
16			GROWTH 2002 - 2006					2.99%	3.50%		1.61%
17			2007	0.4000		10.50%		4.20%		27.50	0.81%
18			2008	0.4118		11.00%		4.53%		27.50	0.40%
19			2010-12	0.3898		12.00%		4.68%	3.50%	29.00	1.23%
20											
21	PNY	PIEDMONT NATURAL GAS COMPANY	2002	0.1579		10.60%		1.67%	8.91	66.18	
22			2003	0.2613		11.80%		3.08%	9.36	67.31	
23			2004	0.3307		11.10%		3.67%	11.15	76.67	
24			2005	0.3106		11.50%		3.57%	11.53	76.70	
25			2006	0.2520		11.00%		2.77%	11.83	74.61	
26			GROWTH 2002 - 2006					2.95%	6.50%		3.04%
27			2007	0.2929		11.50%		3.37%		73.80	-1.09%
28			2008	0.2897		11.50%		3.33%		73.00	-1.08%
29			2010-12	0.2581		11.50%		2.97%	2.50%	71.80	-0.76%
30											
31	SJI	SOUTH JERSEY INDUSTIES, INC.	2002	0.3852		12.50%		4.82%	9.67	24.41	
32			2003	0.4307		11.60%		5.00%	11.26	26.46	
33			2004	0.4810		12.50%		6.01%	12.41	27.76	
34			2005	0.4971		12.40%		6.16%	13.50	28.98	
35			2006	0.6260		16.30%		10.20%	15.12	29.30	
36			GROWTH 2002 - 2006					6.44%	13.00%		4.67%
37			2007	0.6370		17.00%		10.83%		29.60	1.02%
38			2008	0.6379		17.00%		10.84%		30.00	1.19%
39			2010-12	0.6364		17.50%		11.14%	5.00%	31.00	1.13%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 03/16/2007
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2002 - 2006
COLUMN (D): VALUE LINE INVESTMENT SURVEY
COLUMN (D): LINES 6, 16 & 26, COMPOUND GROWTH RATE
COLUMN (E): VALUE LINE INVESTMENT SURVEY
COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
DIVIDEND GROWTH COMPONENTS

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 5

LINE NO.	STOCK SYMBOL								
1	SWX	SOUTHWEST GAS CORPORATION	2002	0.2931	6.50%	1.91%	17.91	33.29	
2			2003	0.2743	6.10%	1.67%	18.42	34.23	
3			2004	0.5060	8.30%	4.20%	19.18	36.79	
4			2005	0.3440	6.40%	2.20%	19.10	39.33	
5			2006	0.5859	9.00%	5.27%	21.58	41.77	
6			GROWTH 2002 - 2006			3.05%	3.00%		5.84%
7			2007	0.5943	9.50%	5.65%		43.00	2.94%
8			2008	0.6178	10.00%	6.18%		44.00	2.63%
9			2010-12	0.6538	10.00%	6.54%	4.00%	47.50	2.60%
10									
11	WGL	WGL HOLDINGS, INC.	2002	-0.1140	7.20%	NMF	15.78	48.56	
12			2003	0.4435	7.20%	3.19%	16.25	48.63	
13			2004	0.3434	11.70%	4.02%	16.95	48.67	
14			2005	0.3744	12.00%	4.49%	17.80	48.65	
15			2006	0.3093	10.20%	3.15%	18.28	48.89	
16			GROWTH 2002 - 2006			3.71%	3.00%		0.17%
17			2007	0.2959	10.50%	3.11%		48.91	0.04%
18			2008	0.3073	10.70%	3.29%		48.92	0.03%
19			2010-12	0.3409	10.50%	3.58%	3.00%	49.00	0.04%

REFERENCES:
COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 03/16/2007
COLUMN (C): COLUMN (A) x COLUMN (B)
COLUMN (C): LINES 6, 16 & 26, SIMPLE AVERAGE GROWTH, 2002 - 2006

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
GROWTH RATE COMPARISON

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 6

WATER COMPANY SAMPLE:

		(A)	(B)		(C) VALUE LINE PROJECTED			(D) VALUE LINE HISTORIC		(E)	(F) 5 - YEAR COMPOUND HISTORY		
LINE NO.	STOCK SYMBOL	(br) + (sv)	ZACKS EPS	EPS	DPS	BVPS	EPS	DPS	BVPS	VALUE LINE & ZACKS AVGS.	EPS	DPS	BVPS
1	AWR	6.74%	-	9.00%	3.00%	6.00%	-2.50%	1.00%	4.50%	3.50%	-0.19%	1.13%	4.32%
2	CWT	5.30%	9.30%	6.50%	1.00%	5.00%	-5.00%	1.00%	3.00%	2.97%	1.75%	0.66%	8.69%
3	SWWC	5.12%	10.00%	11.00%	9.50%	8.50%	1.50%	10.00%	14.00%	9.21%	0.63%	8.78%	13.07%
4	WTR	5.35%	9.60%	7.50%	9.50%	7.00%	8.50%	6.50%	11.00%	8.51%	6.70%	8.29%	12.40%
5				8.50%	5.75%	6.63%	0.63%	4.63%	8.13%		2.23%	4.71%	9.62%
6	AVERAGES	5.63%	9.63%		6.96%			4.46%		6.05%		5.52%	

NATURAL GAS LDC SAMPLE:

		(A)	(B)		(C) VALUE LINE PROJECTED			(D) VALUE LINE HISTORIC		(E)	(F) 5 - YEAR COMPOUND HISTORY		
LINE NO.	STOCK SYMBOL	(br) + (sv)	ZACKS EPS	EPS	DPS	BVPS	EPS	DPS	BVPS	VALUE LINE & ZACKS AVGS.	EPS	DPS	BVPS
1	ATG	6.01%	5.00%	3.50%	5.50%	2.50%	13.50%	2.00%	8.50%	5.79%	10.57%	8.20%	13.38%
2	ATO	5.55%	5.30%	5.00%	1.50%	4.00%	10.00%	2.00%	8.50%	5.19%	8.37%	1.65%	10.04%
3	LG	3.70%	-	2.00%	2.50%	5.00%	6.50%	0.50%	3.50%	3.33%	19.05%	1.10%	5.75%
4	NJR	6.20%	5.00%	2.50%	3.00%	8.00%	8.00%	3.50%	8.50%	5.50%	7.59%	4.66%	14.57%
5	GAS	3.72%	2.00%	4.00%	1.00%	4.50%	-3.50%	3.50%	1.50%	1.86%	1.28%	0.27%	3.99%
6	NWN	5.15%	5.30%	7.00%	4.00%	3.50%	5.00%	1.00%	3.50%	4.19%	9.04%	2.49%	3.85%
7	PNY	3.71%	5.50%	3.00%	4.00%	2.50%	5.00%	5.00%	6.50%	4.50%	7.53%	4.39%	7.34%
8	SJI	11.29%	6.50%	9.50%	5.50%	5.00%	11.50%	2.50%	13.00%	7.64%	19.16%	5.24%	11.82%
9	SWX	7.25%	5.00%	8.00%	1.50%	4.00%	-0.50%	-	3.00%	3.50%	14.30%	-	4.77%
10	WGL	5.59%	3.00%	1.00%	1.50%	3.00%	6.00%	1.50%	3.00%	2.71%	14.22%	1.35%	3.75%
11				4.55%	3.00%	4.20%	6.15%	2.39%	5.95%		11.11%	2.93%	7.93%
12	AVERAGES	5.59%	4.73%		3.92%			4.83%		4.42%		7.32%	

REFERENCES:
COLUMN (A): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (B): ZACKS INVESTMENT RESEARCH (www.zacks.com)
COLUMN (C): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 04/27/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)
COLUMN (D): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 04/27/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)
COLUMN (E): SIMPLE AVERAGE OF COLUMNS (B) THRU (D) LINES 1, 3, 5 AND 7
COLUMN (F): 5-YEAR ANNUAL GROWTH RATE CALCULATED WITH DATA COMPILED FROM VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 04/27/2007 (WATER COMPANIES) AND 03/16/2007 (NATURAL GAS LDC's)

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
CAPM COST OF EQUITY CAPITAL

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 7

BASED ON A GEOMETRIC MEAN:

LINE NO.	STOCK SYMBOL	k	=	r_f	+ [	ß	x (	r_m	-	r_f	)]	=	(A) (B) EXPECTED RETURN
1	AWR	k	=	4.98%	+ [	0.80	x (	10.40%	-	4.98%	)]	=	9.32%
2	CWT	k	=	4.98%	+ [	0.90	x (	10.40%	-	4.98%	)]	=	9.86%
3	SWWC	k	=	4.98%	+ [	0.90	x (	10.40%	-	4.98%	)]	=	9.86%
4	WTR	k	=	4.98%	+ [	0.90	x (	10.40%	-	4.98%	)]	=	9.86%
5	**WATER COMPANY AVERAGE**					0.88							9.72%
6	ATG	k	=	4.98%	+ [	0.95	x (	10.40%	-	4.98%	)]	=	10.13%
7	ATO	k	=	4.98%	+ [	0.80	x (	10.40%	-	4.98%	)]	=	9.32%
8	LG	k	=	4.98%	+ [	0.85	x (	10.40%	-	4.98%	)]	=	9.59%
9	NJR	k	=	4.98%	+ [	0.80	x (	10.40%	-	4.98%	)]	=	9.32%
10	GAS	k	=	4.98%	+ [	1.30	x (	10.40%	-	4.98%	)]	=	12.03%
11	NWN	k	=	4.98%	+ [	0.75	x (	10.40%	-	4.98%	)]	=	9.04%
12	PNY	k	=	4.98%	+ [	0.80	x (	10.40%	-	4.98%	)]	=	9.32%
13	SJI	k	=	4.98%	+ [	0.70	x (	10.40%	-	4.98%	)]	=	8.77%
14	SWX	k	=	4.98%	+ [	0.85	x (	10.40%	-	4.98%	)]	=	9.59%
15	WGL	k	=	4.98%	+ [	0.85	x (	10.40%	-	4.98%	)]	=	9.59%
16	**NATURAL GAS LDC AVERAGE**					0.87							9.67%

REFERENCES:
COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [ß (r_m - r_f)]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY
r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)
ß = THE BETA COEFFICIENT OF A GIVEN SECURITY
r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) A 6-WEEK AVERAGE OF THE 91-DAY T-BILL RATES THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S "SELECTION & OPINIONS" PUBLICATION FROM 04/06/2007 THROUGH 05/11/2007 WAS USED AS A RISK FREE RAT OF RETURN.

(b) THE MARKET RATE PROXY USED WAS THE GEOMETRIC MEAN FOR S&P 500 RETURNS OVER THE 1926 - 2006 PERIOD. THE DATA WAS OBTAINED FROM MORNINGSTAR, INC.'S STOCKS, BONDS, BILLS AND INFLATION: 2007 YEARBOOK.

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
CAPM COST OF EQUITY CAPITAL

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 7
PAGE 2 OF 2

BASED ON AN ARITHMETIC MEAN:

LINE NO.	STOCK SYMBOL						(A)									(B) EXPECTED RETURN
		k	=	r_f	+	[	ß	x	(	r_m	-	r_f	)	]	=	
1	AWR	k	=	4.98%	+	[	0.80	x	(	12.30%	-	4.98%	)	]	=	10.84%
2	CWT	k	=	4.98%	+	[	0.90	x	(	12.30%	-	4.98%	)	]	=	11.57%
3	SWWC	k	=	4.98%	+	[	0.90	x	(	12.30%	-	4.98%	)	]	=	11.57%
4	WTR	k	=	4.98%	+	[	0.90	x	(	12.30%	-	4.98%	)	]	=	11.57%
5	**WATER COMPANY AVERAGE**						0.88									11.38%
6	ATG	k	=	4.98%	+	[	0.95	x	(	12.30%	-	4.98%	)	]	=	11.93%
7	ATO	k	=	4.98%	+	[	0.80	x	(	12.30%	-	4.98%	)	]	=	10.84%
8	LG	k	=	4.98%	+	[	0.85	x	(	12.30%	-	4.98%	)	]	=	11.20%
9	NJR	k	=	4.98%	+	[	0.80	x	(	12.30%	-	4.98%	)	]	=	10.84%
10	GAS	k	=	4.98%	+	[	1.30	x	(	12.30%	-	4.98%	)	]	=	14.50%
11	NWN	k	=	4.98%	+	[	0.75	x	(	12.30%	-	4.98%	)	]	=	10.47%
12	PNY	k	=	4.98%	+	[	0.80	x	(	12.30%	-	4.98%	)	]	=	10.84%
13	SJI	k	=	4.98%	+	[	0.70	x	(	12.30%	-	4.98%	)	]	=	10.10%
14	SWX	k	=	4.98%	+	[	0.85	x	(	12.30%	-	4.98%	)	]	=	11.20%
15	WGL	k	=	4.98%	+	[	0.85	x	(	12.30%	-	4.98%	)	]	=	11.20%
16	**NATURAL GAS LDC AVERAGE**						0.87									11.31%

REFERENCES:
COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [\, ß\, (r_m - r_f\,)\,]$$

WHERE: k = THE EXPECTED RETURN ON A GIVEN SECURITY
r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)
ß = THE BETA COEFFICIENT OF A GIVEN SECURITY
r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) A 6-WEEK AVERAGE OF THE 91-DAY T-BILL RATES THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S "SELECTION & OPINIONS" PUBLICATION FROM 04/06/2007 THROUGH 05/11/2007 WAS USED AS A RISK FREE RA OF RETURN.

(b) THE MARKET RATE PROXY USED WAS THE ARITHMETIC MEAN FOR S&P 500 RETURNS OVER THE 1926 - 2006 PERIOD. THE DATA WAS OBTAINED FROM MORNINGSTAR, INC.'S STOCKS, BONDS, BILLS AND INFLATION: 2007 YEARBOOK.

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
ECONOMIC INDICATORS - 1990 TO PRESENT

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 8

LINE NO.	YEAR	(A) CHANGE IN CPI	(B) CHANGE IN GDP (1996 $)	(C) PRIME RATE	(D) FED. DISC. RATE	(E) FED. FUNDS RATE	(F) 91-DAY T-BILLS	(G) 30-YR T-BONDS	(H) A-RATED UTIL. BOND YIELD	(I) Baa-RATED UTIL. BOND YIELD
1	1990	5.40%	1.90%	10.01%	6.98%	8.10%	7.49%	7.49%	9.86%	10.06%
2	1991	4.21%	-0.20%	8.46%	5.45%	5.69%	5.38%	5.38%	9.36%	9.55%
3	1992	3.01%	3.30%	6.25%	3.25%	3.52%	3.43%	3.43%	8.69%	8.86%
4	1993	2.99%	2.70%	6.00%	3.00%	3.02%	3.00%	3.00%	7.59%	7.91%
5	1994	2.56%	4.00%	7.14%	3.60%	4.20%	4.25%	4.25%	8.31%	8.63%
6	1995	2.83%	2.50%	8.83%	5.21%	5.84%	5.49%	5.49%	7.89%	8.29%
7	1996	2.95%	3.70%	8.27%	5.02%	5.30%	5.01%	5.01%	7.75%	8.17%
8	1997	1.70%	4.50%	8.44%	5.00%	5.46%	5.06%	5.06%	7.60%	8.12%
9	1998	1.60%	4.20%	8.35%	4.92%	5.35%	4.78%	4.78%	7.04%	7.27%
10	1999	2.70%	4.50%	7.99%	4.62%	4.97%	4.64%	4.64%	7.62%	7.88%
11	2000	3.40%	3.70%	9.23%	5.73%	6.24%	5.82%	5.82%	8.24%	8.36%
12	2001	1.60%	0.80%	6.92%	3.41%	3.88%	3.38%	5.95%	7.59%	8.02%
13	2002	2.40%	1.60%	4.67%	1.17%	1.66%	1.60%	5.38%	7.41%	7.98%
14	2003	1.90%	2.50%	4.12%	2.03%	1.13%	1.01%	4.92%	6.18%	6.64%
15	2004	3.30%	3.90%	4.34%	2.35%	1.35%	1.37%	5.03%	5.77%	6.20%
16	2005	3.40%	3.10%	6.16%	4.16%	3.16%	3.17%	4.57%	5.38%	5.78%
17	2006	2.50%	3.10%	7.97%	5.97%	4.97%	4.83%	4.88%	5.94%	6.30%
18	CURRENT	2.80%	1.30%	8.25%	6.25%	5.25%	4.87%	4.82%	6.01%	6.17%

REFERENCES:
COLUMN (A): 1990 - CURRENT, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS WEB SITE
COLUMN (B): 1990 - CURRENT, U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS WEB SITE
COLUMN (C) THROUGH (G): 1990 - 2003, FEDERAL RESERVE BANK OF ST. LOUIS WEB SITE
COLUMN (C) THROUGH (F): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 05/11/2007
COLUMN (G) THROUGH (I): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 05/11/2007
COLUMN (H) THROUGH (J): 1990 - 2000, MOODY'S PUBLIC UTILITY REPORTS
COLUMN (H) THROUGH (I): 2001, MERGENT 2002 PUBLIC UTILITY MANUAL
COLUMN (H) THROUGH (I): 2003 MERGENT NEWS REPORTS

ARIZONA-AMERICAN WATER COMPANY
ANTHEM/AGUA FRIA WATER AND WASTEWATER DISTRICTS
TEST YEAR ENDED DECEMBER 31, 2005
CAPITAL STRUCTURES OF SAMPLE COMPANIES

DOCKET NO. WS-01303A-06-0403
SUREBUTTAL SCHEDULE WAR - 9

AVERAGE CAPITAL STRUCTURES OF SAMPLE WATER COMPANIES

LINE NO.		AWR	PCT.	CWT	PCT.	SWWC	PCT.	WTR	PCT.	WATER COMPANY AVERAGE	PCT.
1	DEBT	$ 267.8	48.6%	$ 291.8	43.3%	$ 128.6	43.6%	$ 951.7	50.8%	$ 410.0	48.3%
2											
3	PREFERRED STOCK	0.0	0.0%	3.5	0.5%	0.5	0.2%	0.0	0.0%	1.0	0.1%
4											
5	COMMON EQUITY	283.7	51.4%	378.3	56.2%	166.0	56.3%	921.6	49.2%	437.4	51.6%
6											
7	TOTALS	$ 551.6	100%	$ 673.6	100%	$ 295.1	100%	$ 1,873.3	100%	$ 848.4	100%

AVERAGE CAPITAL STRUCTURES OF SAMPLE NATURAL GAS COMPANIES

LINE NO.		ATG	PCT.	ATO	PCT.	LG	PCT.	NJR	PCT.	GAS	PCT.
1											
2											
3	DEBT	$ 2,161.0	57.3%	$ 2,565.9	60.9%	$ 395.5	49.5%	$ 613.0	49.6%	$ 851.6	56.2%
4											
5	PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.8	0.1%	0.0	0.0%	1.4	0.1%
6											
7	COMMON EQUITY	1,609.0	42.7%	1,648.1	39.1%	402.6	50.4%	621.7	50.4%	661.4	43.7%
8											
9	TOTALS	$ 3,770.0	100%	$ 4,214.0	100%	$ 798.9	100%	$ 1,234.7	100%	$ 1,514.4	100%
10											
11											
12		NWN	PCT.	PNY	PCT.	SJI	PCT.	SWX	PCT.	WGL	PCT.
13											
14	DEBT	$ 517.0	46.3%	$ 825.0	48.3%	$ 358.0	44.7%	$ 1,286.4	56.2%	$ 576.1	37.8%
15											
16	PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.0	0.0%	100.0	4.4%	28.2	1.8%
17											
18	COMMON EQUITY	599.5	53.7%	882.9	51.7%	443.0	55.3%	901.4	39.4%	921.1	60.4%
19											
20	TOTALS	$ 1,116.5	100%	$ 1,707.9	100%	$ 801.1	100%	$ 2,287.8	100%	$1,525.4	100%
21											
22											
23		NATURAL GAS LDC									
24		AVERAGE	PCT.								
25											
26	DEBT	$ 1,015.0	53.5%								
27											
28	PREFERRED STOCK	13.0	0.7%								
29											
30	COMMON EQUITY	869.1	45.8%								
31											
32	TOTALS	$ 1,897.1	100%								

REFERENCE:
MOST RECENT SEC 10-K FILINGS OR ANNUAL REPORTS